

TOSHIBA

Leading Innovation >>>

OWNER'S MANUAL

Integrated Digital LCD TV

 DOLBY
DIGITAL PLUS
PULSE

 DVB

 HDMI[®]
HIGH-DEFINITION MULTIMEDIA INTERFACE

 MHL[®]
Mobile High-Definition Link

32W2300A

39L2300A

50L2300A

Owner's Record

You will find the model number and serial number on the back of the TV. Record these numbers in the spaces provided below.

Refer to them whenever you call upon your TOSHIBA dealer regarding this product.

Model number:

Serial number:

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Introduction

Welcome to Toshiba

- Thank you for purchasing this Toshiba LCD Colour television. This manual will help you use the exciting features of your new TV.
- Instructions in this manual are based on using the remote control and not the buttons on the television.
- Please read all safety and operating instructions in this manual carefully, and keep this manual for future reference.

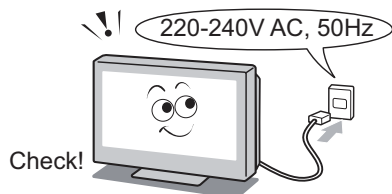
Important Safety Instructions

Be sure to observe the following instructions and precautions to ensure safe use of this TV.

Installation

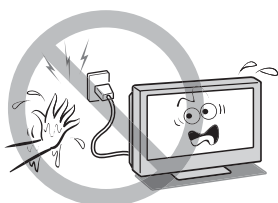
- 1) **Always connect the power plug to an appropriate electrical outlet equipped with 220-240V, AC 50Hz.**

Never use the TV outside the specified voltage range. It may cause a fire or an electric shock.



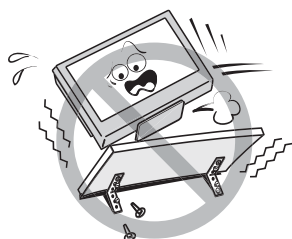
- 2) **Never insert or remove the power plug with wet hands.**

This may cause an electric shock.



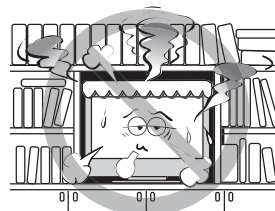
- 3) **Never place the TV in an unstable location such as on a shaky table, incline or location subject to vibration.**

The TV may drop or fall off which may cause injury or damage.



- 4) **Never block or cover the slots and openings in the cabinet.**

- Never place the TV so that it is facing upward or on its side.
- Never place the TV in a closet, bookcase or other similar area where the ventilation is poor.
- Never drape a newspaper, tablecloth or curtain on the TV.
- When installing the TV against a wall, always keep the TV at least 10 cm away from the wall.
- Never place the TV on a soft unstable surface, such as a carpet, or a cushion.
- The inside of this TV will overheat if the ventilation holes are covered, blocked or sealed, which may result in a fire.



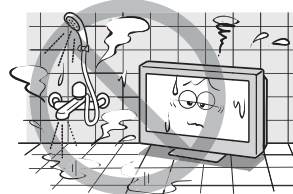
- 5) **Never place the TV near a heater or in direct sunlight.**

The surface of the cabinet or power cord may melt and result in a fire or an electric shock.



- 6) **Never place the TV in an area exposed to high humidity levels, such as in a bathroom or close to a humidifier.**

This may cause a fire or an electric shock.



- 7) **Never place the TV next to a stove where it will be exposed to oil, smoke, steam, or in a location where there is a large quantity of dust.**

This may cause a fire or an electric shock.

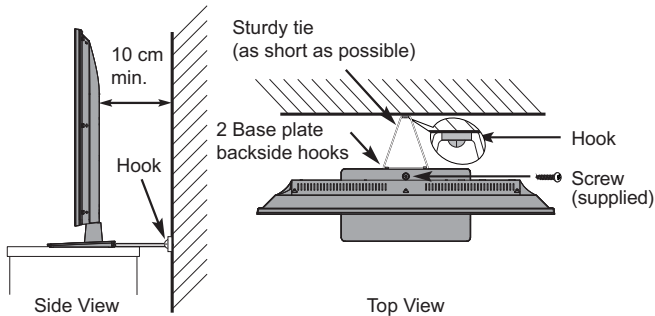


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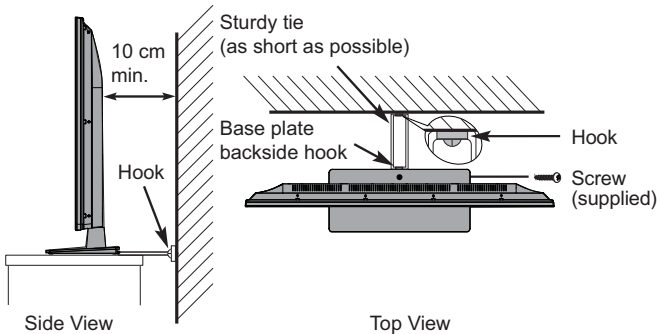
- 8) **Always place the TV on the floor or a sturdy, level, stable surface that can support the weight of the unit.**

To secure the TV, use a sturdy strap from the base plate backside hook to a wall stud, pillar, or other firm immovable structure. Make sure the strap is tight, secure, and parallel to the floor.

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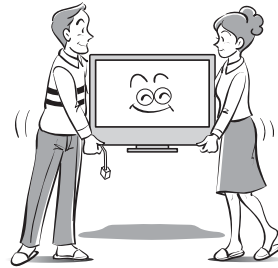
Wall mounting of the TV should only be performed by qualified servicing personnel. Use only with the wall mount bracket specified by the manufacturer.

- 9) **Precautions for moving the TV**

When moving the TV, be sure to remove the plug from the wall outlet and disconnect the antenna and audio/video cables, as well as any steady ties. Fire or electric shock may result if the power cord is damaged.

When carrying the TV, at least two people are needed. Be sure to carry it upright. Never carry the TV with the screen facing up or

down.



- 10) **Precautions for installing on outdoor antenna**

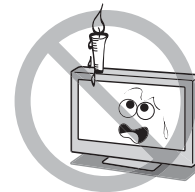
An outside antenna system should not be located in the vicinity of overhead power lines, or other electric light or power circuits.

If the antenna falls down or drops, it may cause injury or electric shock.



Use

- 1) **Never place hot objects or open flame sources, such as lighted candles or nightlights, on or close to the TV.**
High temperatures can melt plastic and lead to fires.



- 2) **The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.**

When liquids are spilled or small items are dropped inside the TV, this may cause a fire or an electric shock. If small objects drop inside the TV, turn off the TV and remove the power plug from the outlet immediately and contact a service technician.



- 3) **Never insert objects (metal or paper) or pour water inside the TV through ventilation holes**

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and other openings.

These items may cause a fire or an electric shock. If these objects are inserted inside the TV, turn off the TV and remove the power plug from the outlet immediately and contact a service technician. Be especially careful that children do not insert objects into the TV.



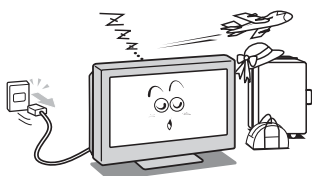
4) Never stand or climb on the TV.

Be especially careful in households with children to prevent them through climbing on top of the TV. It may move, fall over, break, become damaged or cause an injury.



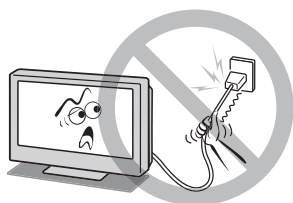
5) When the TV will not be used for a long period of time, such as during vacation or travel, remove the power plug from the wall outlet for safety.

- The TV is not completely disconnected from the power supply line, as minute current is consumed even when the ϕ / Power switch is turned off.
- The Mains plug or an appliance coupler is used as the disconnect device, therefore the disconnect device shall remain readily operable.



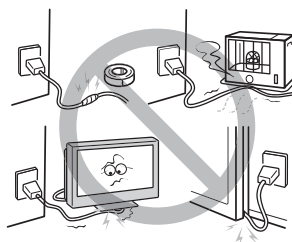
6) Never pull on the power cord when removing the plug from the wall outlet.

Always hold the plug firmly when removing it. If the power cord is yanked, the cord may become damaged and a fire or an electric shock may occur.



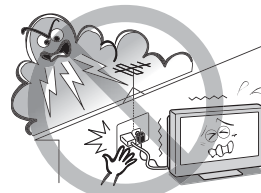
7) Never cut, break, modify, twist, bunch up or bend the cord or apply excessive force or tension to it.

Never place heavy objects on the cord or allow it to overheat as this may cause damage, a fire or an electric shock. Contact a service technician if the power cord is damaged.



8) If there is thunder or lightning, never touch the antenna cable or other connected cables.

You may suffer an electric shock.



Service

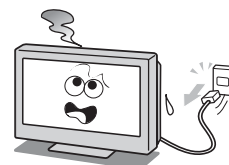
1) Never repair, modify or disassemble the TV by yourself.

It may cause a fire or an electric shock. Consult a service technician for inspection and repairs.



2) When a malfunction occurs, or if smoke or an unusual odour comes from the TV, turn off the TV and remove the power plug from the outlet immediately.

Make sure that the smoke or smell has stopped, then contact a service technician. If the TV is still used in this condition, it may cause a fire or an electric shock.

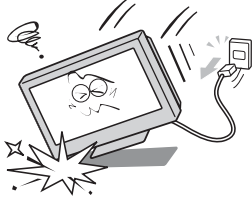


3) If the TV is dropped or the cabinet is broken, turn off the TV and remove the power plug from the outlet immediately.

If the TV is still power used in this condition, it may

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cause a fire or an electric shock. If the cabinet is broken, be careful when handling the TV to prevent an injury. Contact a service technician for inspection and repair.



- 4) **When the TV reaches the end of its useful life, ask a qualified service technician to properly dispose of the TV.**

Note:

The lamp unit contains a small amount of mercury. Disposal of mercury may be regulated due to environmental considerations. Dispose of the used lamp unit by the approved method for your area. For disposal or recycling information, please contact your local authorities.



Cleaning

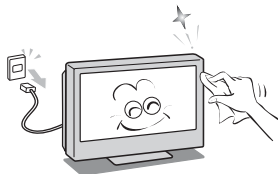
- 1) **Remove the power plug before cleaning.**

Never use solvents such as benzene or thinner to clean the TV.

- These solvents may distort the cabinet or damage its finish.
- If rubber or vinyl products remain in contact with the TV for a long time, a stain may result.

If the cabinet becomes dirty, clean it with a soft, dry cloth.

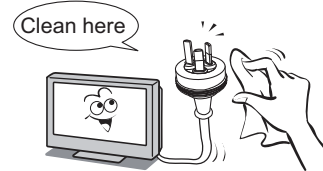
When cleaning the surface of the LCD display, wipe the panel surface gently with a soft, dry cloth.



- 2) **Periodically disconnect the power plug from the outlet and check it.**

If dust has collected on the power plug connectors, clean off the dust with dry cloth.

This dust may cause a fire due to reduced insulation on the plug.



- 3)



Avoid using chemicals (such as air refreshers, cleaning agents, etc.) on or near the TV pedestal. Studies indicate that plastics may weaken and crack over time from the combination effects of chemical agents and mechanical stress (such as weight of TV). Failure to follow these instructions could result in serious injury and/or permanent damage to TV and TV pedestal.

Important information

If a television is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Only using furniture that can safely support the television.
- Ensuring the television is not overhanging the edge of the supporting furniture.
- Not placing the television on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television to a suitable support.
- Not standing the televisions on cloth or other materials placed between the television and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the television or its controls.

- 1) **About LCD screen**

- If you have the LCD screen facing to the sun, the LCD screen will be damaged.
- Be aware of locating the TV in the place such as window side or outside of the room.

2) About cabinet and LCD screen

Never spray volatile compounds such as insecticide on the cabinet and LCD screen.

This may cause a discolouration or damage the cabinet and LCD screen.

3) Some pixels of the screen do not light up

The LCD display panel is manufactured using an extremely high level of precision technology, however sometimes some pixels of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.

Note: Interactive video games that involve shooting a "gun" type of joystick at an onscreen target may not work with this TV.

4) About Interference

The LCD display may cause interference in image, sound, etc. of other electronic equipment that receives electromagnetic waves (e.g. AM radios and video equipment).

5) About using under the low temperature places

If you use the TV in the room of 0°C or less, the picture brightness may vary until the LCD monitor warms up. This is not a sign of a malfunction.

6) About afterimage

If a still picture is displayed, an afterimage may remain on the screen, however it will disappear. This is not a sign of malfunction.

Exemptions

- Toshiba is not liable for any damage caused by fires, natural disaster (such as thunder, earthquake, etc.), acts by third parties, accidents, owner's misuse, or uses in other improper conditions.
- Toshiba is not liable for incidental damages (such as profit loss or interruption in business, modification or erasure of record data, etc.) caused by use or inability to use of product.
- Toshiba is not liable for any damage caused by neglect of the instructions described in the owner's manual.
- Toshiba is not liable for any damage caused by misuse or malfunction through simultaneous use of this product and the connected equipment.

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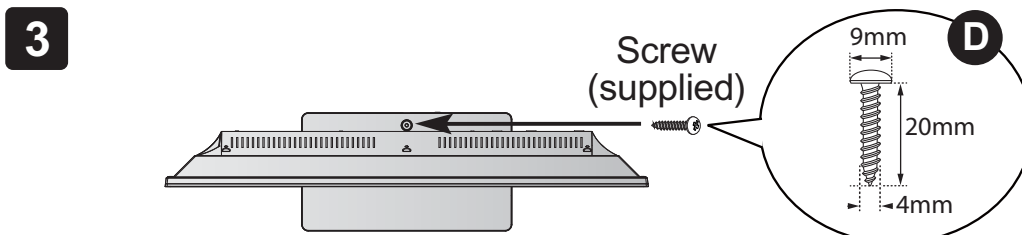
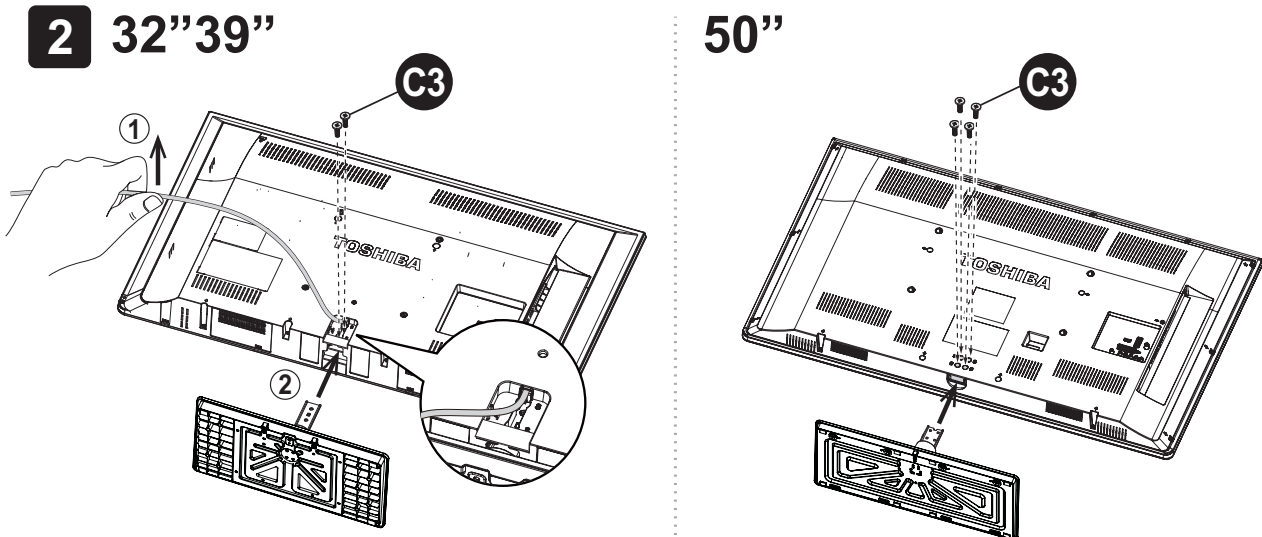
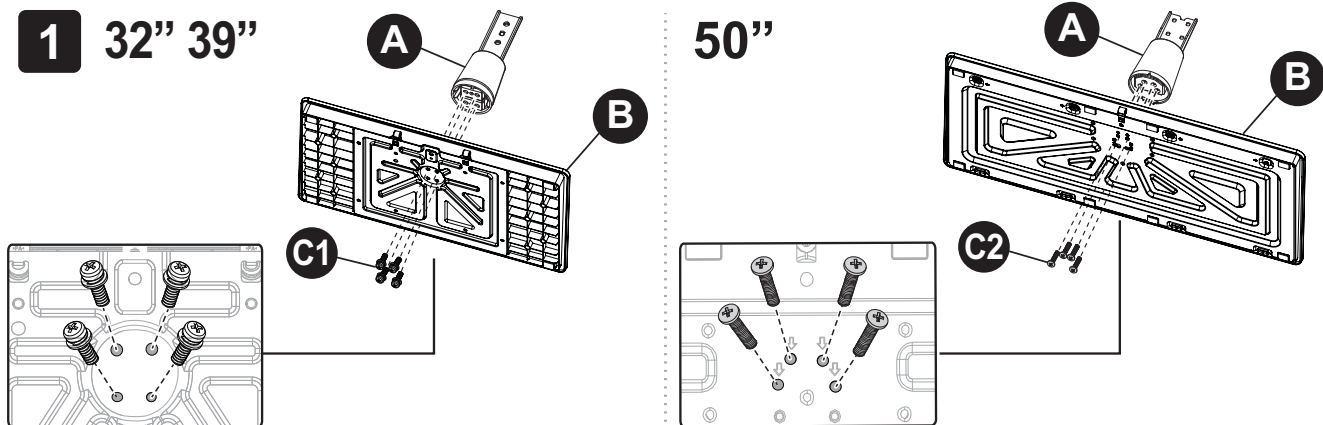
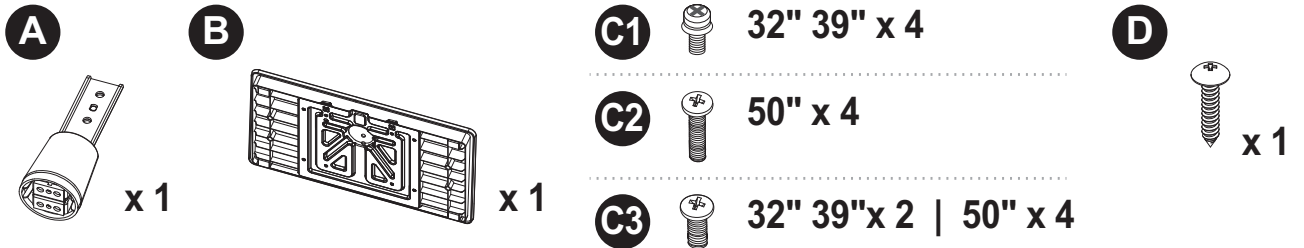
Stand Assembly Instructions

CAUTION: Before beginning pedestal assembly, carefully lay the front of the LCD Panel face down on a flat, cushioned surface such as a quilt or blanket. Leave the bottom of the unit protruding over the edge of the surface and assemble as indicated.

Avoid using chemicals on or near TV pedestal or serious injury could result. See User's Manual for more details.

To prevent possible electric shock, protect the power cord from being pinched when attaching the pedestal stand.

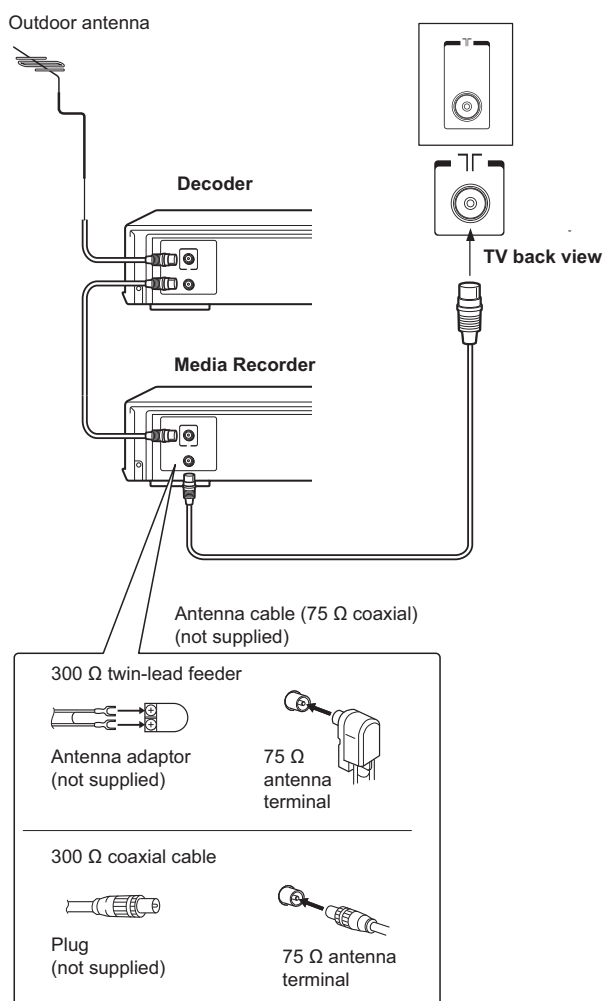
Note: Extreme care should always be used when attaching the pedestal stand to avoid damage to the LCD panel.



Getting started

Connecting an antenna

Optimum reception of colour requires a good signal and will generally mean that an outdoor antenna must be used. The exact type and positioning of the antenna will depend upon your particular area. Your Toshiba dealer or service personnel can best advise you on which antenna to use in your area. Before connecting the antenna cable, turn off all main power switches.

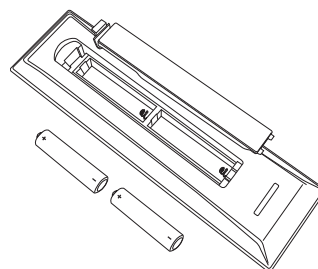


Exploring your new TV

Installing the remote control batteries

Remove the battery cover.

Insert two AAA, 1.5V batteries matching the $-/+$ polarities of the battery to the $-/+$ marks inside the battery compartment.



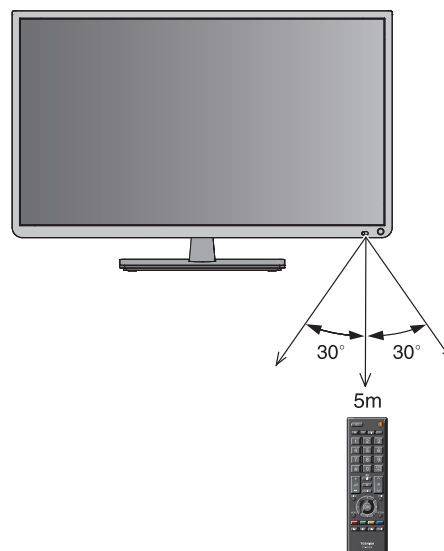
Cautions:

- *Dispose of batteries in a designated disposal area. Never throw batteries into a fire.*
- *Attention should be drawn to the environmental aspects of battery disposal.*
- *Never mix battery types or combine used batteries with new ones.*


Notes:

- *If the remote control does not operate correctly, or if the operating range becomes reduced, replace both batteries with new ones.*
- *If the batteries are dead or if you will not use the remote control for a long time, remove the batteries to prevent battery acid from leaking into the battery compartment.*

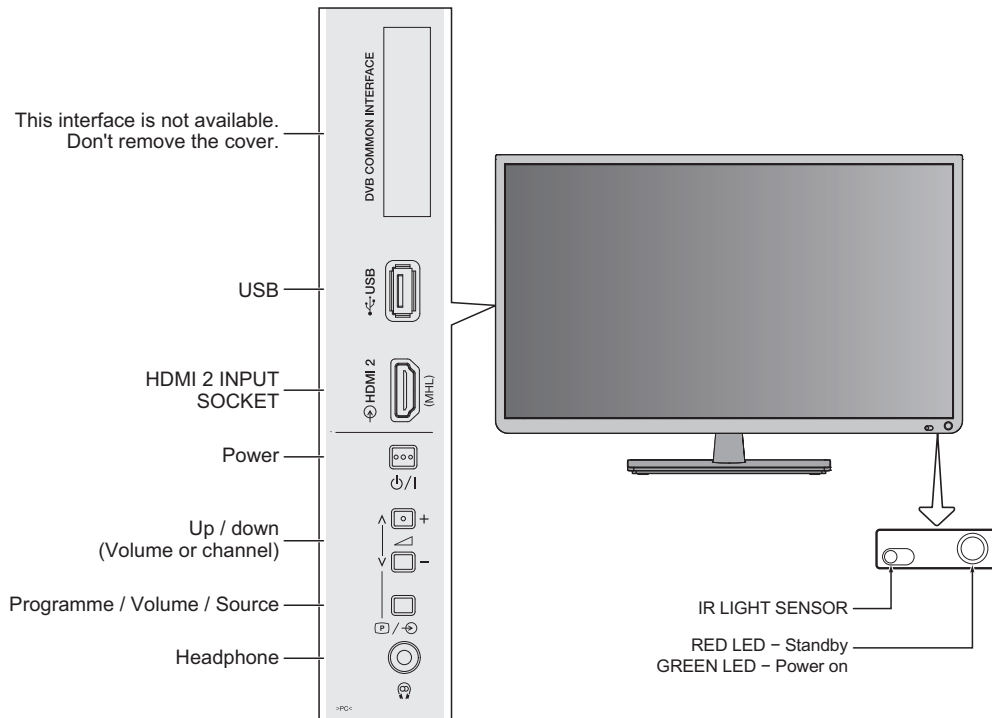
Effective range



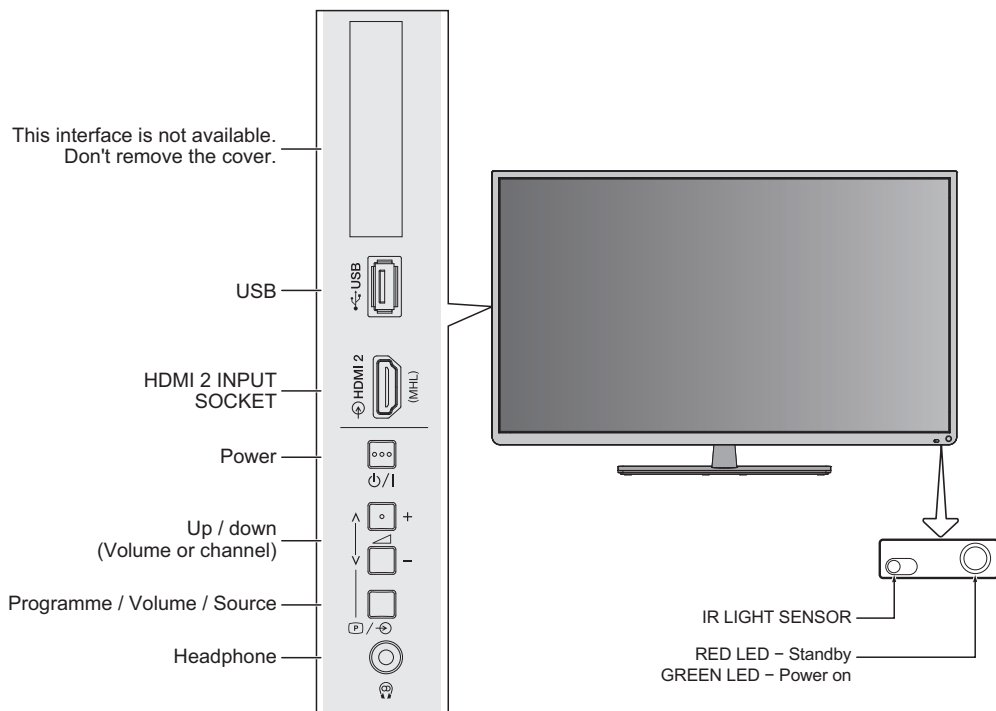
TV front and side panel controls

You can operate your TV using the buttons on the TV control panel or the remote control. The back and side of the panel provide the terminal connections to connect other equipment to your TV. ( page 45 **Connecting your TV**)






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Getting started

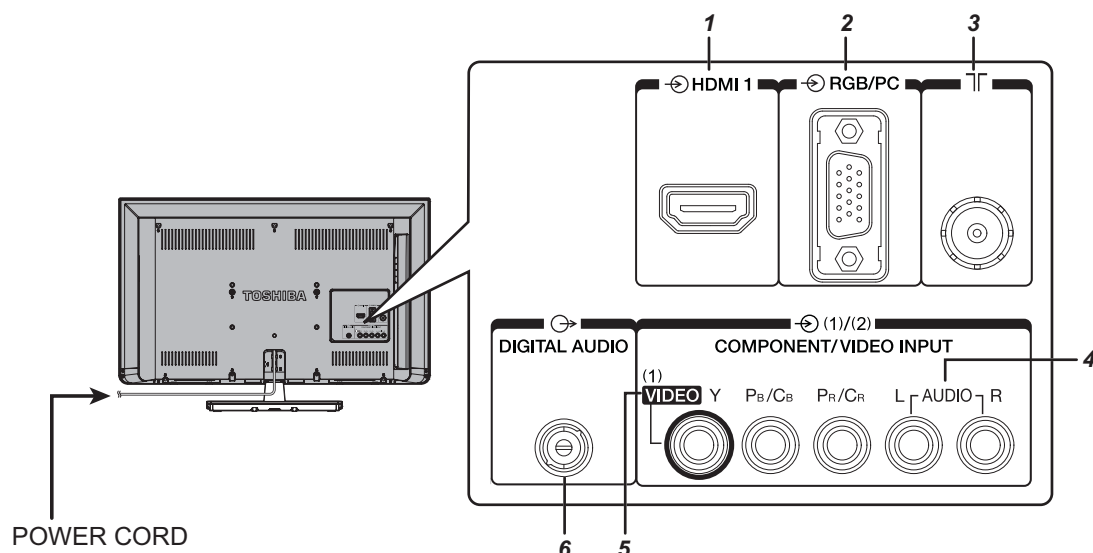
 Power	Press to turn the TV on or standby.
	Program position: When no menu is on-screen, these buttons select the programme position. Menu up/down: When a TV menu is on-screen, these buttons function as up/down menu navigation buttons.
	Volume: When no menu is on-screen, these buttons adjust the volume level. Menu left/right: When a TV menu is on-screen, these buttons are used for left/right menu navigation and to adjust settings.
 Input	Input Source: When no menu is on-screen, this button selects the input source. ( page 29 Input Selection) OK: When a TV menu is on-screen, this button will make a selection or take you to the next available menu layer.

 IR Sensor	Point your remote control at this area when selecting programme position or adjusting the volume level, etc.
 Power LED	Red LED: Standby Green LED: Power On
USB port	For use when inserting a USB disk. (Movies: MKV, AVI, MPEG, MPG, VOB, Photo: JPEG, Music: MP3) (Also served for software upgrade.)
 Headphone jack	For use with headphones.
HDMI input	High-Definition Multimedia Interface input receives digital audio and uncompressed digital video from an HDMI device or uncompressed digital video from a DVI device. ( page 45 Connecting an HDMI or a DVI device)

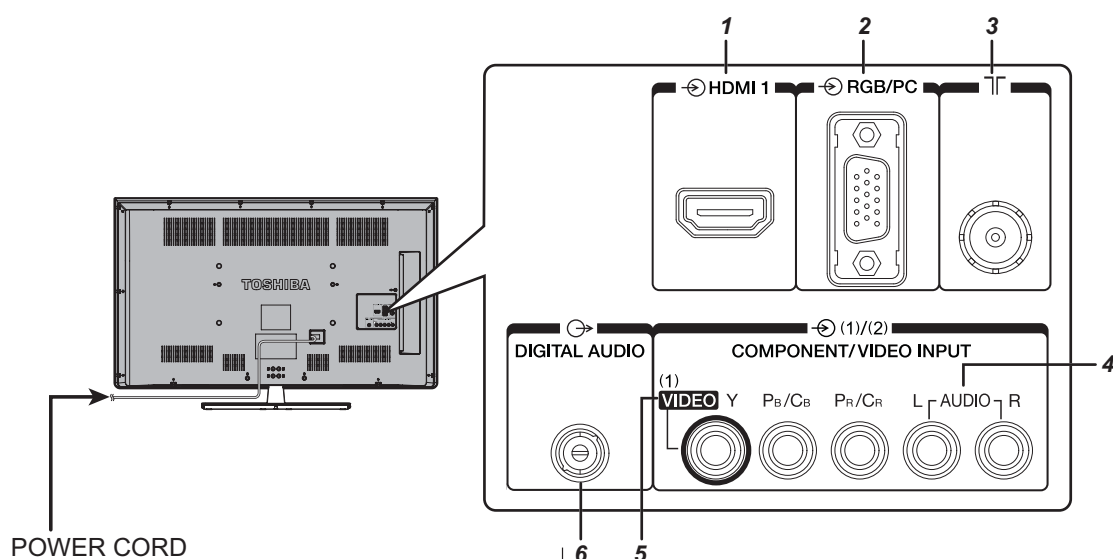
TV back panel connections

Before connecting any external equipment, turn off all main power switches. If there is no switch, remove the mains plug from the wall socket.

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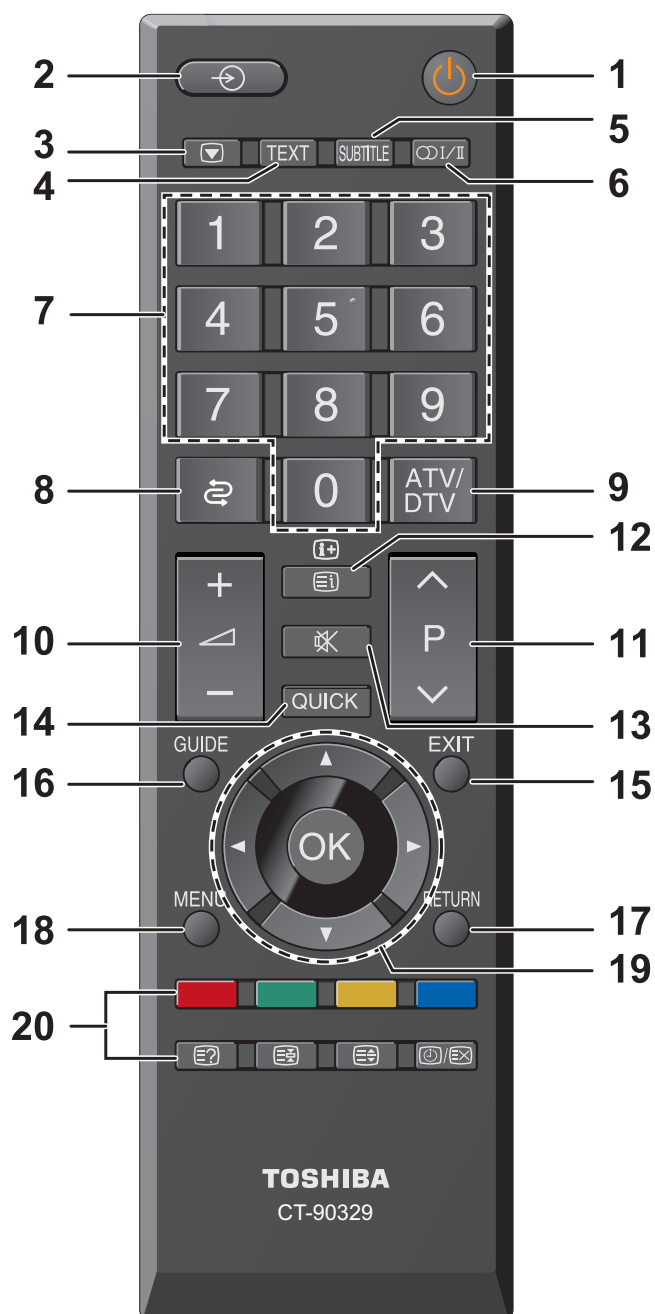


- 1 **HDMI input terminals** — High-Definition Multimedia Interface input receives digital audio and uncompressed digital video from an HDMI device or uncompressed digital video from a DVI device. (page 45 [Connecting an HDMI or a DVI device](#))
- 2 **PC input terminal** — For use when connecting a personal computer (PC). (page 47 [Connecting a computer](#))
- 3 **(Antenna input terminal)** — Analogue TV/Digital DVB-T antenna signal input. (page 10 [Connecting an antenna](#))
- 4 **Audio input terminal** — Standard audio inputs for use when connecting component video input or composite video input.
- 5 **Component input terminals** —
 - For use when connecting a high-definition component video device with standard audio output.
 - For use when connecting a standard (composite) video and standard audio inputs.
- 6 **Digital Audio (coaxial) output terminal** — For use when connecting an amplifier with coaxial type digital audio input.

Learning about the remote control

Location of controls

Simple at-a-glance reference of your remote control.



1. Switch between TV ON or Standby
2. Switch between external input sources
3. Still Picture
4. To display the teletext screen
5. TEXT subtitle pages if available
6. Stereo/Bilingual transmissions
7. Number buttons
8. To return to the previous programme
9. Switch between ATV and DTV
10. Change the volume
11. Change the channel
12. In TV mode: Display on-screen information
In Text mode: Access the index page
13. Mute the sound
14. Display the QUICK access menu
15. Exit the menu system
16. Display EPG
17. Go to the previous level of the menu
18. Display the on-screen menu
19. Menu navigation: ▲, ▼, ◀, ▶:
In Text mode: Change the page
OK Confirm the selection
20. Colour button: Text control buttons
Reveal concealed text
Hold a wanted page
Enlarge text display size
Select a page while viewing a normal picture

Using the Remote Control

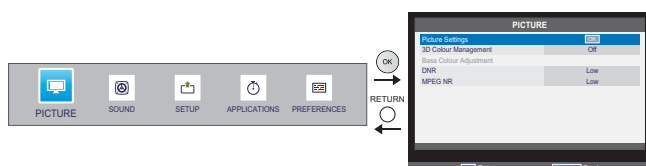
To set up the television you will now need to use the on screen menus. Press **MENU** on the remote control to see the menus.

The on-screen menu appears as a list of five topics. As each symbol is selected by pressing ◀ or ▶ on the navigation ring on the remote control.

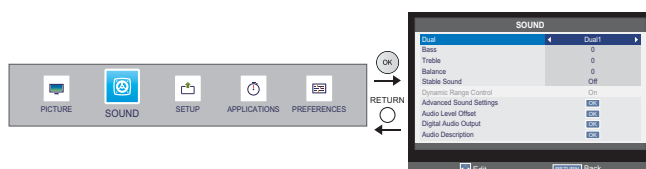
To use the options, press Ⓚ to enter the sub menu. Then press ▲ or ▼ on the navigation ring to move up and down through the menu and use Ⓚ to select the required choice. Follow the on-screen instructions. The functions of each menu are described in detail throughout this manual.

TV SETUP menu chart

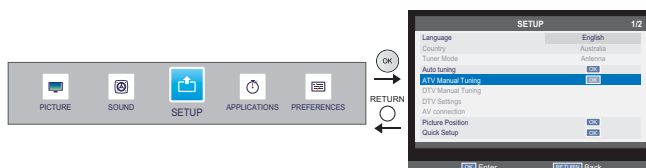
PICTURE menu



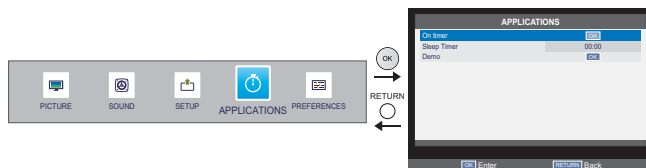
SOUND menu



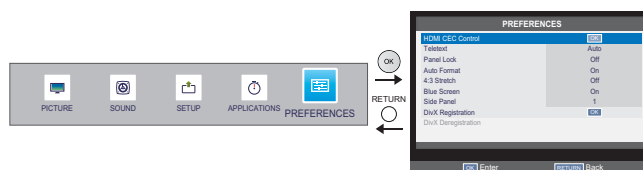
SETUP menu



APPLICATIONS menu



PREFERENCES menu






Note for menu system:

- If you do not make a selection for a while, the menu display disappears automatically.

Turning on the TV

Switching On

If the RED Standby LED is unlit, check that the plug is connected to the power supply. If the picture does not appear press  on the remote control, it may take a few moments.


To put the television into Standby press  on the remote control. To view the television press  again. The picture may take a few seconds to appear.


For energy saving:

We recommend that you use the television with factory settings. These settings are designed for energy saving. Unplugging the mains plug will reduce energy use to zero. This is recommended when the television is not being used for long periods, e.g. when on holiday. Reducing the brightness of the screen will reduce energy use. Energy efficiency reduces energy consumption and can save money by reducing electricity bills.





Note: If you skip this step, the channel scan can still be performed later in the Setup Menu.

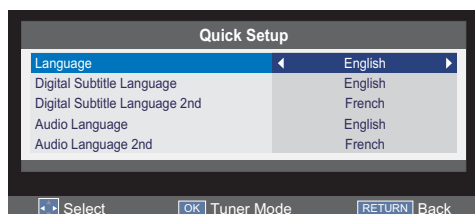
Quick Setup





Before switching on the TV, put your decoder and media recorder to Standby if they are connected and ensure the antenna is connected. To setup the TV, use the buttons on the remote control. ( page 14 [Learning about the remote control](#))

- For first time use, plug in the television and press the  button.
The **Quick Setup** screen will appear at the first use.

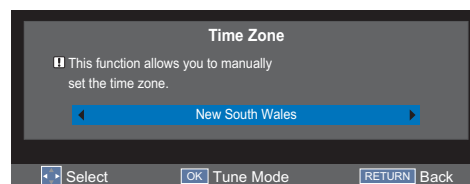
Note: This function is accessed in the **SETUP → Quick Setup** menu.

- Press  or  to select **Language** and then press  or  to select your language.





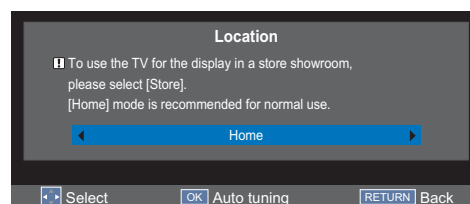
- Press  or  to select **Digital Subtitle Language**, **Digital Subtitle Language 2nd**, **Audio Language** and **Audio Language 2nd**, then press  or  to select your preferred language.

- Press  or  to select your time zone.

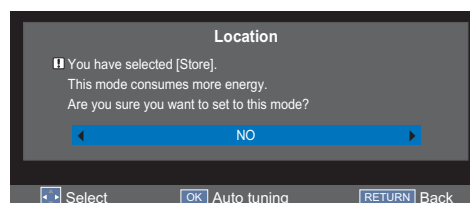


Press  to select **Location**.

- Press  or  to select **Home** or **Store**. For normal home use, select **Home**.



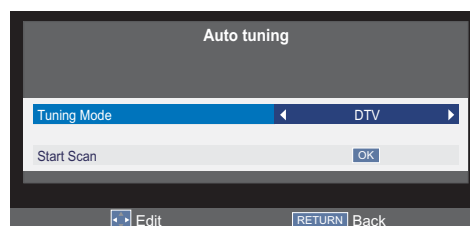
When **Store** is selected, the confirmation window appears.



Press  or  to select **YES** or **NO**.

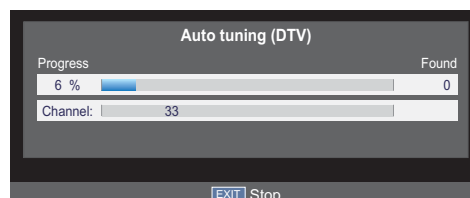
- Press  to enter the **Auto tuning** menu.

Note: Please make sure the aerial is connected to the TV before tuning.



Press  or  to select Tuning Mode and then press  or  to select **ATV**, **DTV** or **ATV and DTV**.

Press  or  to select **Start Scan** and press .



The search will begin for all available stations. The slide bar will move along the line as the search progresses.

You must allow the television to complete the search.

When the search is complete the television will automatically select channel 1. This may not be a clear picture or the signal may be weak, so the station order can be changed using **ATV/DTV Manual Tuning** in the **SETUP** menu.

Setting the programmes

Note: When **Parental Block** is activated, the 4-digit password is needed.

Auto Tuning

The **Auto tuning** function will completely re-tune the television and can be used to update the channel list.

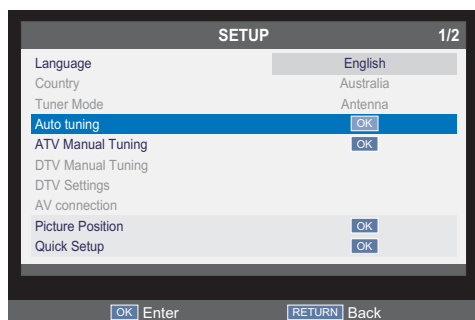
Note: It is recommended that **Auto tuning** is run periodically to ensure that all new services are added.

Note: All the current channels and settings, for example, the locked channels, will be lost.

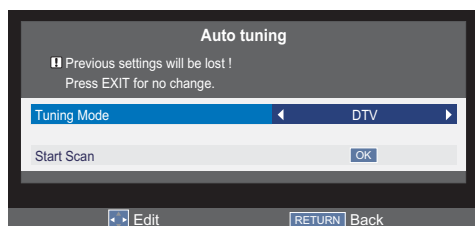
1. Press **MENU**. Press ◀ or ▶ to select **SETUP** and press **OK** to enter the submenu.



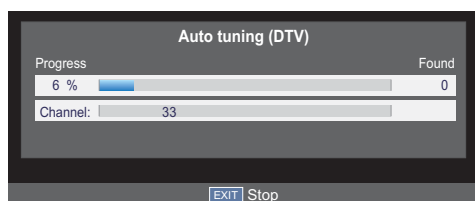
2. Press ▲ or ▼ to select **Auto tuning**, and press **OK** to enter the submenu.



3. Press ▲ or ▼ to select Tuning Mode and press ◀ or ▶ to select **ATV**, **DTV** or **ATV and DTV**.



4. Press ▲ or ▼ to select **Start Scan** and press **OK** to start Auto Tuning.

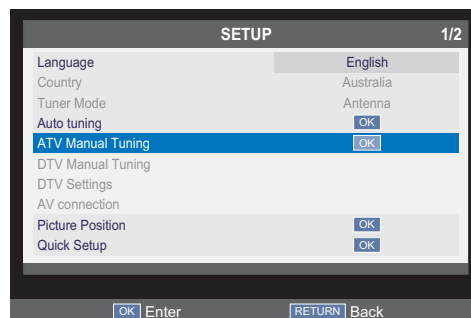


Manual Tuning

ATV Manual Tuning

There are two TV modes: ATV and DTV that can be tuned-in manually using Manual Tuning.

1. Press **MENU**. Press ◀ or ▶ to select **SETUP** and press **OK** to enter the submenu.
2. Press ▲ or ▼ to select **ATV Manual Tuning** and press **OK** to enter the submenu.

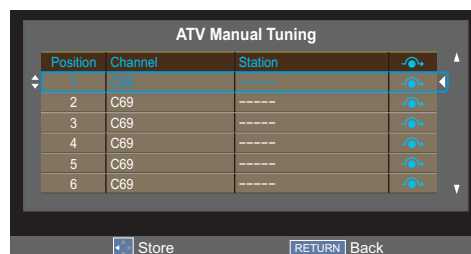


3. Press ▲ or ▼ to select the programme position you want to arrange and then press ▶.



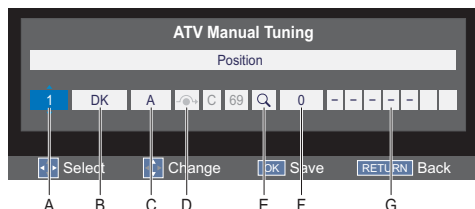
4. Press ▲ or ▼ move through the list to your preferred position. As you do so the other stations will move to make room.

Press ◀ to store programme position.



Getting started

- Press **OK** to display the breakdown menu. Press **◀** or **▶** to select an item, then press **▲** or **▼** to select the item as shown below.



A	Position	The number to be pressed on the remote control.
B	System	Specific to certain areas.
C	Colour System	Factory set to Auto, should only be changed if problems are experienced, i.e. NTSC input from external source.
D	Skip	means nothing has been stored or the facility to skip the channel is On .
E	Searching	Search up and down for a signal.
F	Manual Fine Tuning	Turn on to execute fine tune function. Turn off to execute manual fine tune function.
G	Station	Station identification. Use the ▲ or ▼ and ◀ or ▶ buttons to enter up to seven characters.

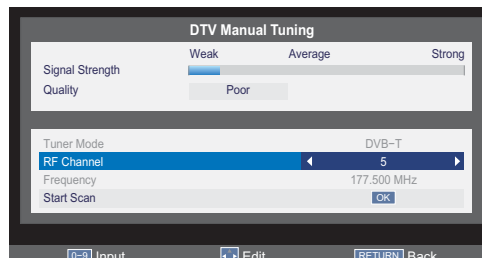
- Press **OK** to save.

DTV Manual Tuning

- Press **MENU**. Press **◀** or **▶** to select **SETUP** and press **OK** to enter the submenu.
- Press **▲** or **▼** to select **DTV Manual Tuning** and press **OK** to enter the submenu.



- Press **▲** or **▼** to select **RF Channel** and press **◀** or **▶** to select or use number key pad on the remote to enter a channel.



- Press **▲** or **▼** to select **Start Scan** and press **OK** to start tuning.

DTV Settings

Channel

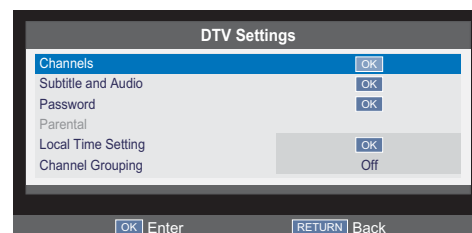
The channel order may be changed to suit your personal preference.

Note: This function is only available in DTV mode.

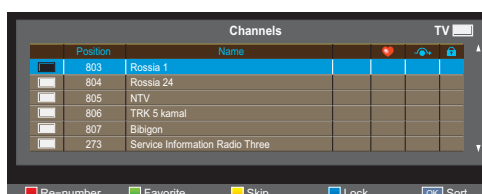
- Press **MENU**. Press **◀** or **▶** to select **SETUP** and press **OK** to enter the submenu.



- Press **▲** or **▼** to select **DTV Settings** and press **OK** to enter the submenu.
- Press **▲** or **▼** to select **Channels** and press **OK**.

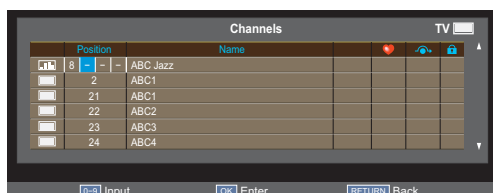


- Press **▲** or **▼** to select channel.



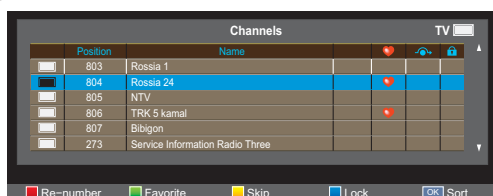
Re-number

- Press the red button on the remote to renumber the highlighted channel.
- Edit the channel number using the number keys on the remote and press **OK**.

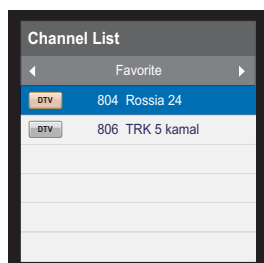


Favorite

- Press the green button on the remote. A  icon appears.

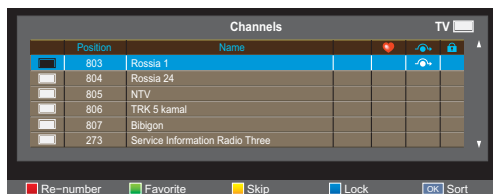


Press **OK** to show the **Channel List** and press **◀** or **▶** to **Favorite**. The desired channel is displayed on the list.




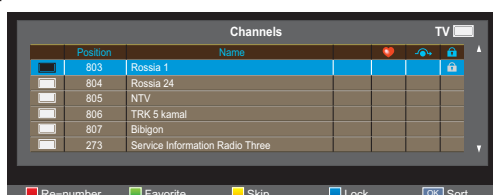
Skip

- Press the yellow button on the remote. A  icon appears.



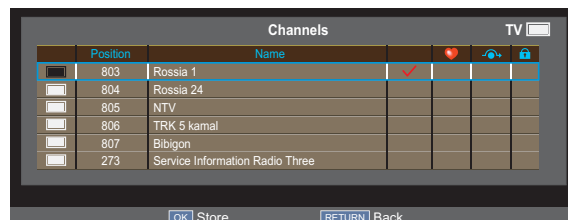
Lock

- Press the blue button on the remote. A  icon appears.

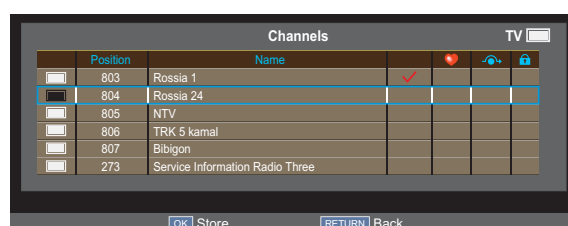


Sort

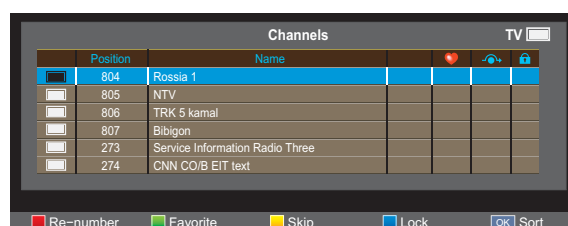
- Press **▲** or **▼** to select the desired channel and then press **OK**. A tick icon appears.



Press **▲** or **▼** to select the channel you wish to swap with the one selected in Step 8 and then press **OK**.



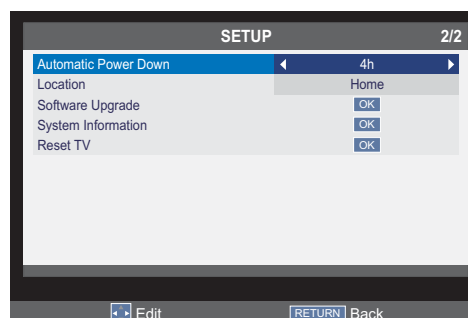
The names of the two channels are swapped.



Automatic Power Down

The TV will automatically turn itself off (standby) within 4 hours, if you do not touch the control buttons on the remote control or on the TV control panel. It will also automatically turn off if no input signal is detected after approximately 15 minutes.

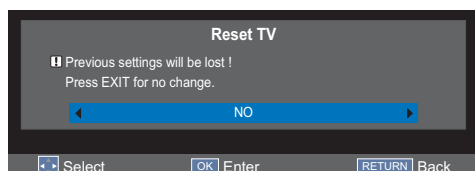
- In the **SETUP** menu, press **▲** or **▼** to select **Automatic Power Down**.
- Press **◀** or **▶** to select **Off**, **4h**, **6h** or **8h**.



Reset TV

Selecting **Reset TV** will reset all TV settings to their original factory values.

1. In the **SETUP** menu, press **▲** or **▼** to select **Reset TV** and press **OK**.
2. Press **◀** or **▶** to select **YES** to confirm or select **NO** to exit and press **OK**.



General Control

The General Functions allow you to select channels and information, adjust sound features, personalise the picture style and select any connected external equipment.

Selecting Channels

To select a channel use the numbered buttons on the remote control.

Channels can also be selected using **P ▲** and **P ▼**.

Stereo and Bilingual Transmissions

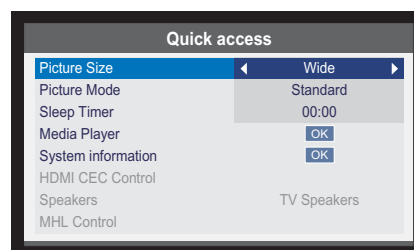
If stereo or dual language broadcasts are transmitted the word Stereo or Dual will appear on the screen each time channels are changed, disappearing after a few seconds. If the broadcast is not in stereo the word Mono will appear.

Stereo: Press **⏻ I/II** to select **Stereo** or **Mono**.

Bilingual: If a bilingual programme is offered, the word Dual will display on screen. To change between languages, press **⏻ I/II** to switch between **Dual 1** and **Dual 2**.

Quick Access

Quick access helps you access some options quickly such as **Picture Size**, **Picture Mode**, **Sleep Timer**, **Media Player**, **System Information**, **HDMI CEC Control**, **Speakers** and **MHL Control**. Press the **QUICK** button to display the **Quick access** menu and use **▲** or **▼** to select the option you would like to change.



Note: *Quick access* items are different depending on the current mode.

Subtitles

If Subtitles are available for your current programme, pressing the **SUBTITLE** button will toggle Subtitles on or off.

Picture Still

This feature is used to hold a still image on the screen. Press **⏻** to hold an image on the screen, press **⏻** again to cancel.

Information

The on-screen information will give the details of the channel programme currently being viewed.
















1. Press **i+**, and the information screen will appear giving details of the channel and programme currently being viewed.



2. Press **▲** or **▼** to choose from Now or Next information guide.

On-Screen Information Icons

Icons will appear on the Information screen giving details about the programmes being broadcast. Details of these icons are listed below:

	Icon	Description
Service info	  	Service type (TV, Radio, TEXT)
		Skip
Audio info		Mono
		Stereo
		Dual mono
		Multichannel
		Dolby Digital
		Dolby Digital+
Audio/Subtitle info		Hearing Impaired
Event info	HD, SD	Video format (HD, SD)
	16:9, 4:3	Video Aspect
		Teletext
		Subtitle (Single, Multi)
		Multi-audio track
	AD	Audio Description
	4 - 18	Parental rating
		Encrypted

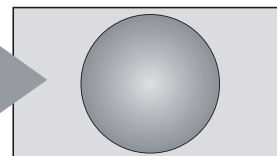
Using the TV's features (General)

Picture Control

Widescreen viewing

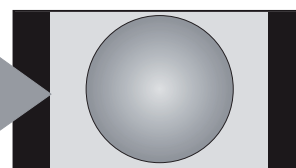
Wide

Use this setting when watching a widescreen DVD, widescreen video tape or a 16:9 broadcast (when available). Due to the range of widescreen formats (16:9, 14:9, 20:9 etc.) black bars may be visible on the top and bottom of the screen.



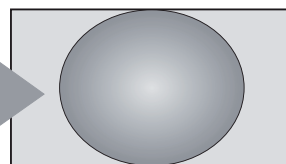
4:3

Use this setting to view a true 4:3 broadcast.



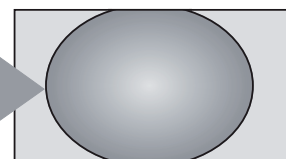
Super Live

This setting will enlarge a 4:3 image to fit the screen by stretching the image horizontally and vertically, holding better proportions at the centre of the image. Some distortion may occur.



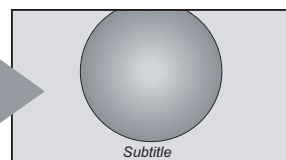
Cinema

When watching letterbox format films/video tapes, this setting will eliminate or reduce the black bars at the top and bottom of the screen by zooming in and selecting the image without distortion.



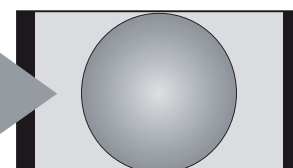
Subtitle

When subtitles are included on a letterbox format broadcast, this setting will raise the picture to ensure that all the text is displayed.



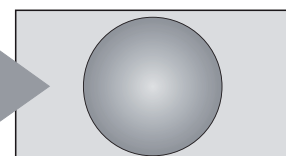
14:9

Use this setting when watching a 14:9 broadcast.



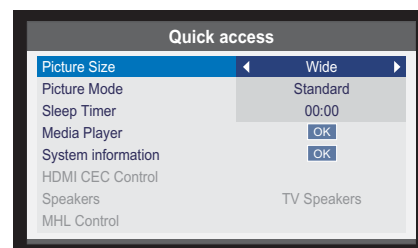
Native

The setting will show the picture without over scan, i.e. WYSIWYG. This option is available when watching video signal source via HDMI or watching DTV (HD signal).



Using the TV's features (General)

Press **QUICK** to display the **Quick access** menu. Use ▲ or ▼ to select the **Picture Size**, and press ◀ or ▶ to select the option.



You can choose the picture size from Wide, 4:3, Super Live, Cinema, Subtitle, 14:9, Native, Normal or Dot by Dot.

Using the special functions to change the size of the displayed image (i.e. changing the height/width ratio) for the purposes of public display or commercial gain may infringe on copyright laws.

Available Picture Size and Position Control

		Wide	4:3	Super Live	Cinema	Subtitle	14:9	Native	Normal	Dot by Dot
ATV		o	o	o	o	o	o	x	x	x
DTV	SD	o	o	o	o	o	o	x	x	x
	HD	o	o	o	o	x	o	o	x	x
CVBS		o	o	o	o	o	o	x	x	x
YPbPr	SD	o	o	o	o	o	o	x	x	x
	HD	o	o	o	o	x	x	x	x	x
HDMI	SD	o	o	o	o	o	o	o	x	x
	HD	o	o	o	o	x	x	o	x	x
D-SUB		o	x	x	x	x	x	x	o	o
DVI		o	x	x	x	x	x	x	o	o

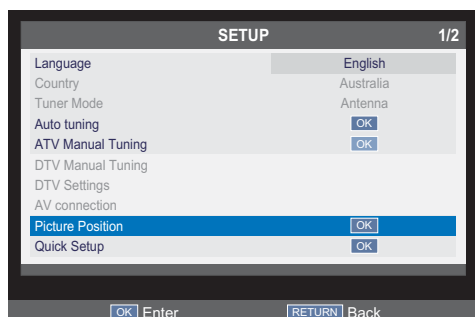
Picture Position

The **Picture Position** may now be adjusted to suit personal preference.

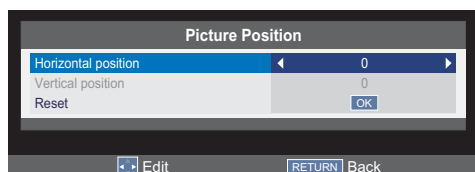
1. Press **MENU**. Press ◀ or ▶ to select **SETUP** and press **OK** to enter the submenu.



2. Press ▲ or ▼ to select **Picture Position** and press **OK** to enter the submenu.



3. Press ▲ or ▼ to select an option you want to adjust, and press ◀ or ▶ to adjust the settings as required.



Picture Mode

You can adjust the picture appearance by selecting the preset value in picture mode based on the programme category.

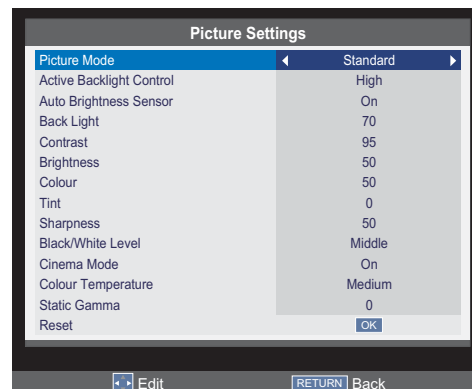
1. Press **MENU**. Press ◀ or ▶ to select **PICTURE** and press **OK** to enter the submenu.



2. Press ▲ or ▼ to select **Picture Settings** and press **OK** to enter the submenu.

3. Press ▲ or ▼ to select **Picture Mode** and press ◀ or ▶ to select **Dynamic**, **Standard**, **Mild**, **Movie**, **Game** or **User**.

Note: *Game is not available for the TV input mode.*



Picture Preferences

You can customise current picture mode settings while selecting **User**.

1. In the **Picture Settings** menu, press ▲ or ▼ to select **Back Light**, **Contrast**, **Brightness**, **Colour**, **Tint**, **Sharpness**.
2. Press ◀ or ▶ to suit your preference.

Black/White Level

This function increases the strength of dark areas of the picture, which improves picture definition.

1. In the **Picture Settings** menu, press ▲ or ▼ to select **Black/White Level**.
2. Press ◀ or ▶ to adjust the level from **Off**, **Low**, **Middle** or **High**. The effect depends on the broadcast and is most noticeable on dark colours.

Cinema Mode

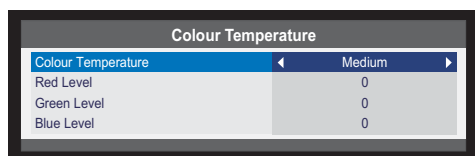
A movie film's picture runs at 24 frames a second, whereas movie software such as DVD, etc., that you enjoy watching on television at home runs at 30 (NTSC) or 25 (PAL) frames a second. To convert this signal to reproduce a smooth motion and picture quality, select the **Cinema Mode**.

1. In the **Picture Settings** menu, press ▲ or ▼ to select **Cinema Mode**.
2. Press ◀ or ▶ to select **On** or **Off**.

Colour Temperature

Colour Temperature increases the 'warmth' or "coolness" of a picture by increasing the red or blue tint.

1. In the **Picture Settings** menu, press ▲ or ▼ to select **Colour Temperature** and press ►.
2. Press ▲ or ▼ to select **Colour Temperature** and press ◀ or ▶ to select **Medium**, **Warm** or **Cool** to suit your preference.



3. Press ▲ or ▼ to select **Red Level**, **Blue Level** or **Green Level** and press ◀ or ▶ to adjust the settings as required.

Static Gamma

The **Static Gamma** feature allows you to adjust the levels of black in the picture.

1. In the **Picture Settings** menu, press ▲ or ▼ to select **Static Gamma**.
2. Press ◀ or ▶ to select the number of **Static Gamma** (-5~+5).

Reset

This feature resets all picture settings to the factory settings.

In the **Picture Settings** menu, press ▲ or ▼ to select **Reset** and press Ⓚ to reset settings.

Note: If any picture settings have not been changed, **Reset** is not available.

Active Backlight Control

When the **Active Backlight Control** feature is activated, **High** mode will control the backlighting levels depending on various scenes such as picture motion, bright scene or dark scene. **Low** mode will control the backlighting level on dark scene.

1. In the **Picture Settings** menu, press ▲ or ▼ to select **Active Backlight Control**.
2. Press ◀ or ▶ to select **Off**, **Low** or **High**.

Auto Brightness Sensor

When the **Auto Brightness Sensor** is activated, it will automatically optimise the backlighting levels to suit ambient light conditions.

1. In the **Picture Settings** menu, press ▲ or ▼ to select **Auto Brightness Sensor**.
2. Press ◀ or ▶ to select **On** or **Off**.

3D Colour Management

When **3D Colour Management** is set to **On**, it allows the **Base Colour Adjustment** feature to become available.

You can adjust the picture colour quality by selecting from 6 base colour adjustments : **Red**, **Green**, **Blue**, **Yellow**, **Magenta** or **Cyan**.

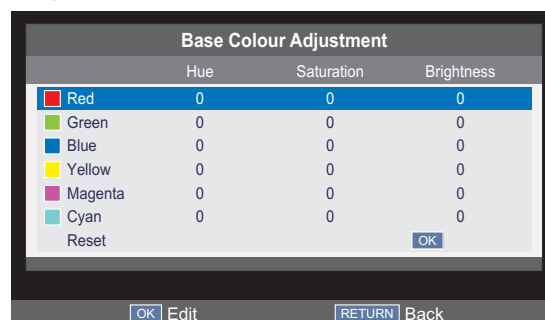
1. In the **PICTURE** menu, press ▲ or ▼ to select **3D Colour Management**.
2. Press ◀ or ▶ to select **On** or **Off**.

Note: When a DVD movie with subtitle is playing back, this mode may not work correctly.

Base Colour Adjustment

The **Base Colour Adjustment** feature allows the adjustment of individual colours to suit personal preference. This can be useful when using an external source. It only can be adjusted when **3D Colour Management** is set to **On**.

1. In the **PICTURE** menu, press ▲ or ▼ to select **Base Colour Adjustment** and press Ⓚ to enter the submenu.
2. Press ▲ or ▼ to select an item you want to adjust and press Ⓚ.



3. Press ◀ or ▶ to select **Hue**, **Saturation** or **Brightness**.
4. Press ▲ or ▼ to adjust the settings as required.

Note: In the PC Input mode, this function is not available.

Digital Noise Reduction

DNR (Digital Noise Reduction) enables you to "soften" the screen representation of a weak signal to reduce the noise effect.

1. In the **PICTURE** menu, press ▲ or ▼ to select **DNR**.
2. Press ◀ or ▶ to select **Off**, **Low**, **Middle** or **High**.

Note: This function is not available for HDMI input.

MPEG NR

When watching a DVD, the compression may cause some words or picture elements to become distorted or pixelated.

Using the **MPEG NR** feature reduces this effect by smoothing out the edges.


1. In the **PICTURE** menu, press ▲ or ▼ to select **MPEG NR**.
2. Press ◀ or ▶ to select **Off**, **Low**, **Middle** or **High**.

Sound Adjustment

Volume


Press ◀ or ▶ to adjust the volume.

Sound Mute

Press  on the remote once to turn the sound off and again to cancel.

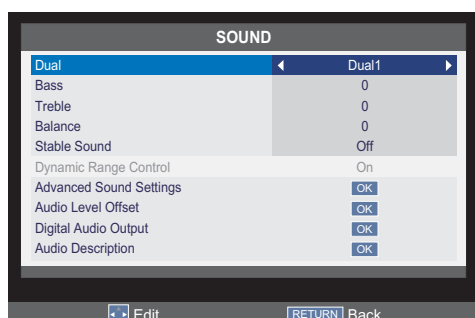
Dual

If a programme or film is being broadcast with a soundtrack in more than one language, the **Dual** feature allows selection between them.

1. Press **MENU**. Press ◀ or ▶ to select **SOUND** and press  to enter the submenu.




2. Press ▲ or ▼ to select **Dual**, and press ◀ or ▶ to choose between **Dual1** or **Dual2**.




Bass, Treble and Balance

The sound controls are accessible in digital and analogue modes.

1. Press **MENU**. Press ◀ or ▶ to select **SOUND** and press  to enter the submenu.
2. Press ▲ or ▼ to select **Bass**, **Treble** or **Balance** and press ◀ or ▶ to change the setting.


Stable Sound

The **Stable Sound** feature limits high volume levels in order to prevent the extreme changes in volume that can occur when channels are changed or a programme switches to a commercial.

1. Press **MENU**. Press ◀ or ▶ to select **SOUND** and press  to enter the submenu.
2. Press ▲ or ▼ to select **Stable Sound**, and press ◀ or ▶ to select **On** or **Off**.



Dynamic Range Control

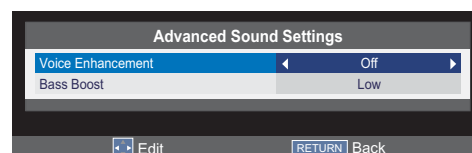
This feature allows control of audio compression for some digital TV programmes (MPEG-1 and MPEG-2 audio programmes are not supported).

1. Press **MENU**. Press ◀ or ▶ to select **SOUND** and press  to enter the submenu.
2. Press ▲ or ▼ to select **Dynamic Range Control**, and press ◀ or ▶ to select **On** or **Off**.

Voice Enhancement

Voice Enhancement emphasises the frequency range of the speaker's voice, making it easier to catch what they are saying.

1. Press **MENU**. Press ◀ or ▶ to select **SOUND** and press  to enter the submenu.
2. Press ▲ or ▼ to select **Advanced Sound Settings** and press  to enter the submenu.
3. Press ▲ or ▼ to select **Voice Enhancement**, and press ◀ or ▶ to select **On** or **Off**.



Bass Boost

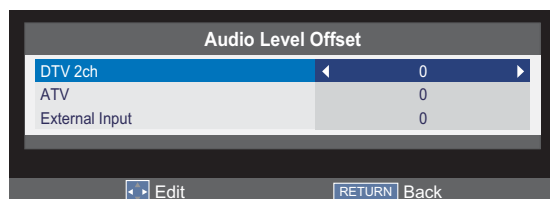
Bass Boost enhances depth of the sound.

1. Press **MENU**. Press ◀ or ▶ to select **SOUND** and press **OK** to enter the submenu.
2. Press ▲ or ▼ to select **Advanced Sound Settings** and press **OK** to enter the submenu.
3. Press ▲ or ▼ to select **Bass Boost**, and press ◀ or ▶ to change the setting.

Audio Level Offset

Sometimes there can be large changes in volume when switching from a DTV 5.1ch to a DTV 2ch, an ATV channel, or an external input. Using the **Audio Level Offset** feature reduces these volume differences.

1. Press **MENU**. Press ◀ or ▶ to select **SOUND** and press **OK** to enter the submenu.
2. Press ▲ or ▼ to select **Audio Level Offset** and press **OK** to enter the submenu.
3. Press ▲ or ▼ to select an option, and press ◀ or ▶ to adjust the volume level.

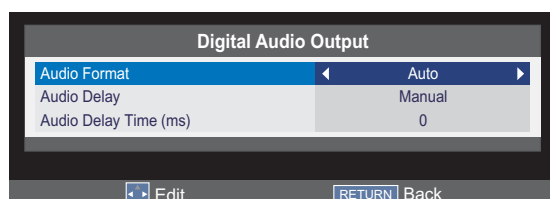


Note:

- The available item changes depending on the current input source. For example, while watching a DTV 2ch programme, only DTV 2ch is available and the other two items are grayed out in the menu. This allows you to easily adjust according to each condition.
- When watching a DTV 5.1ch programme, this feature is not available.

Digital Audio Output

1. Press **MENU**. Press ◀ or ▶ to select **SOUND** and press **OK** to enter the submenu.
2. Press ▲ or ▼ to select **Digital Audio Output** and press **OK** to enter the submenu.
3. Press ▲ or ▼ to select **Audio Format**, and press ◀ or ▶ to select **PCM** or **Auto**.



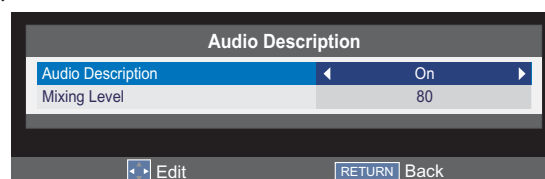
4. Press ▲ or ▼ to select **Audio Delay**, and press ◀ or ▶ to select **Auto** or **Manual**.
5. Press ▲ or ▼ to select **Audio Delay Time (ms)**, and press ◀ or ▶ to change the setting.

Note: *Audio Delay Time (ms)* is only available when **Audio Delay** is **Manual**.

Audio Description

Audio Description is an additional narration describing on-screen action, body language, expressions and movements for people with visual disabilities while watching the TV. This function enables you to choose the type of narrations.

1. Press **MENU**. Press ◀ or ▶ to select **SOUND** and press **OK** to enter the submenu.
2. Press ▲ or ▼ to select **Audio Description** and press **OK** to enter the submenu.
3. Press ▲ or ▼ to select **Audio Description**, and press ◀ or ▶ to select **On** or **Off**.



4. Press ▲ or ▼ to select **Mixing Level**, and press ◀ or ▶ to change the setting.

Note:

- **Mixing Level** can only be adjusted when **Audio Description** is **On**.
- Press the **AD** button on the remote control to switch the **Audio Description On** or **Off**.

Applications Control

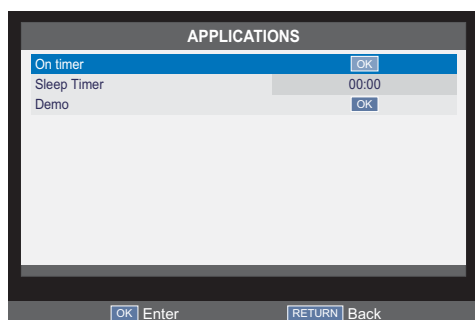
On Timer

This feature allows you to set the television to turn on automatically to a preset channel at a certain time of day or after a certain length of time.

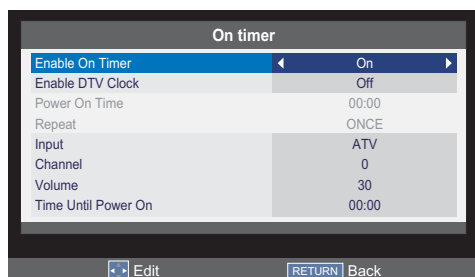
1. Press **MENU**. Press ◀ or ▶ to select **APPLICATIONS** and press **OK** to enter the submenu.



2. Press ▲ or ▼ to select **On timer** and press **OK** to enter the submenu.



3. Press ▲ or ▼ to select **Enable On Timer** and press ◀ or ▶ to select **On** or **Off**.



Note: The settings are only available when **Enable On Timer** is **On**.

4. Press ▲ or ▼ to select **Enable DTV Clock** and press ◀ or ▶ to select **On** or **Off**.

Note: **Power On Time** and **Repeat** are only available when **Enable DTV Clock** is **On**.

5. Press ▲ or ▼ to select **Power On Time** and press ◀ or ▶ or use the number key pad on the remote to enter the time.
6. Press ▲ or ▼ to select **Repeat** and press ◀ or ▶ to select **ONCE**, **DAILY**, **Mon.~Fri.**, **Mon.~Sat.** or **Sat.~Sun.**
7. Press ▲ or ▼ to select **Input** and press ◀ or ▶ to select **ATV**, **EXT 1**, **EXT 2**, **HDMI 1**, **HDMI 2**, **PC** or **DTV**.

8. Press ▲ or ▼ to select **Channel** and press ◀ or ▶ to change the channel number or use the number key pad on the remote to enter the channel number.

Note:

- **Channel** is only available when the **Input** is **ATV** or **DTV**.
- **Blank screen** will appear if not tuned.

9. Press ▲ or ▼ to select **Volume** and press ◀ or ▶ to modify the volume, or use the number key pad on the remote to enter the volume.

10. Press ▲ or ▼ to select **Time Until Power On** and press ◀ or ▶ or use the number key pad on the remote to enter the time for the TV to turn on automatically.

Note: **Time Until Power On** is only available when **Enable DTV Clock** is **Off**.


Sleep Timer

The television can be set to turn itself Off after a certain length of time.

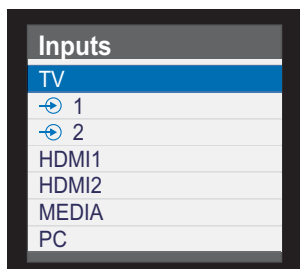
1. Press **MENU** and press ◀ or ▶ to select **APPLICATIONS**.
2. Press ▲ or ▼ to select **Sleep Timer** (Turn off the TV).
3. Press ◀ or ▶ to modify the time the TV should turn off, or use the number key pad on the remote to enter the time.

Input Selection

Use the Input Selection feature if the television does not switch over automatically when using an external device.

Pressing , a list will appear on-screen showing all external equipment.

Use  or  to highlight and  to select.



HDMI® displays equipment connected to Input HDMI on the back of the television. It is designed for best performance with 1080i/1080p high definition signals.

HDMI CEC Control

This feature uses CEC (Consumer Electronics Control) technology, and allows the control of Toshiba HDMI CEC compatible equipment from the television's remote control.

Note: Not all Toshiba products currently support HDMI CEC.




Equipment Control

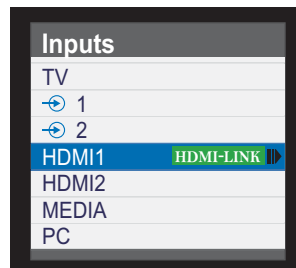
The **HDMI CEC** mode on the television's remote control allows the control of connected **HDMI CEC** equipment being watched.




To control the **HDMI CEC** input source, first select the equipment with **HDMI CEC** input source selection, then switch the mode on the remote control to **HDMI CEC** and press any buttons.

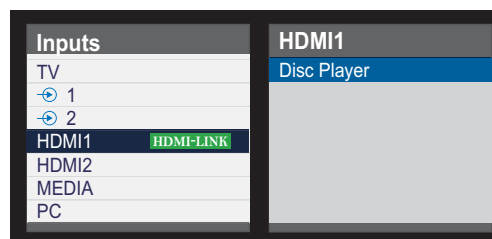
The available functions are dependent on the equipment connected. Not all the remote control keys may be available. Please refer to the operation manual for each piece of equipment connected.

Select HDMI CEC Device

1. Press . A list appears on screen showing modes and all stored external equipment.
2. The **HDMI-LINK** icon appears automatically after detected with **HDMI CEC** compatible equipment. Press  or  to highlight the input source shown with the **HDMI-LINK** icon.



3. Press , and the device selection menu appears showing all connected **HDMI CEC** equipment.
4. Press  or  to highlight the desired **HDMI CEC** equipment, and then press  to select.



HDMI CEC Menus

By activating the **Enable HDMI-LINK** feature in the **HDMI CEC Control** menu, individual **HDMI-LINK** features can then be activated.

One Touch Play

The function of **HDMI CEC** will automatically power on the television that was in standby mode and switch the television's input source to the port connected with the audio/video equipment by powering-on or playing from the audio/video equipment.

Note: This feature is dependent on the connected equipment and television setting.

System Standby

This feature automatically switches the connected equipment into standby when the television goes into standby and conversely for the television to switch into standby when connected equipment goes into standby. It is selected in the **HDMI CEC Control** menu.

Note: This feature is dependent on the connected equipment and television setting.

System Audio Control

Using the **Speaker Preference** feature allows the television's remote control to adjust the volume or mute the sound of the speakers connected to the television via an AV amplifier.

Ensure that the connected AV amplifier and **HDMI CEC** equipment are selected in the input source selection and that the **Speaker Preference** is set to **Amplifier** in the **HDMI CEC Control** menu.

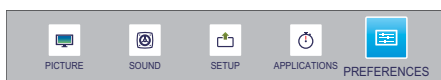
Note: When the AV Amplifier is switched on, its input source changed or the volume adjusted, the sound will be output from the AV Amplifier's speakers even if TV speakers has been selected. Turn the television off then on again to output the sound from the TV's speakers.

The full function may not work and is dependent on the amplifier being used.

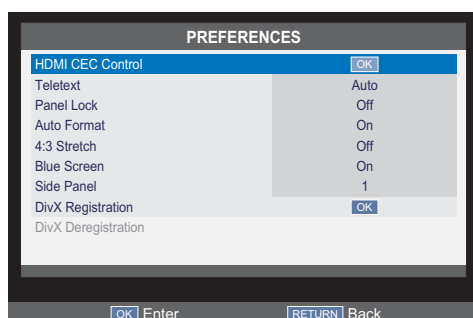
Enable HDMI-LINK

When the **Enable HDMI-LINK** is set to **On**, it allows the other functions to be enabled.

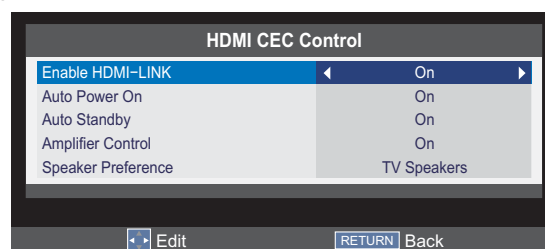
1. Press **MENU**. Press ◀ or ▶ to select **PREFERENCES** and press **OK** to enter the submenu.



2. Press ▲ or ▼ to select **HDMI CEC Control**, and press **OK** to enter the submenu.



3. Press ▲ or ▼ to select **Enable HDMI-LINK**, and press ◀ or ▶ to select **On** or **Off**.



Auto Power On

The **Auto Power On** setting allows the television to be automatically switched On if user pressed Play key on the **HDMI CEC** device.

1. In the **HDMI CEC Control** menu, press ▲ or ▼ to select **Auto Power On**.
2. Press ◀ or ▶ to select **On** or **Off**.

Auto Standby

When the **Auto Standby** is enabled, switching off the television will automatically switch off all connected **HDMI CEC** equipment.

1. In the **HDMI CEC Control** menu, press ▲ or ▼ to select **Auto Standby**.
2. Press ◀ or ▶ to select **On** or **Off**.

Amplifier Control

When **Amplifier Control** is set to **On**, it allows the **Speaker Preference** feature to become available.

1. In the **HDMI CEC Control** menu, press ▲ or ▼ to select **Amplifier Control**.
2. Press ◀ or ▶ to select **On** or **Off**.

Speaker Preference

This feature allows the audio output preference to be set to the **TV speakers** or **Amplifier** speakers. The **Amplifier** option lets the television's remote control adjust or mute the volume of the audio.

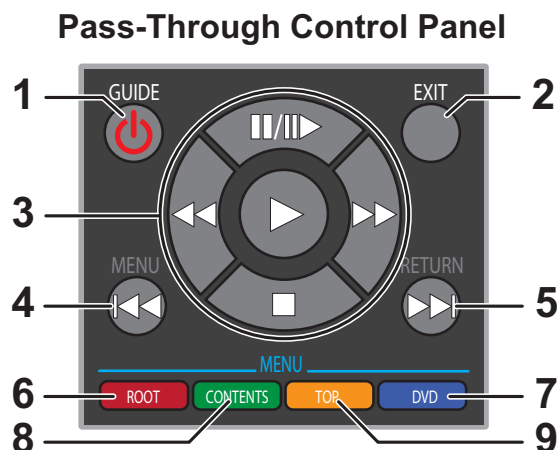
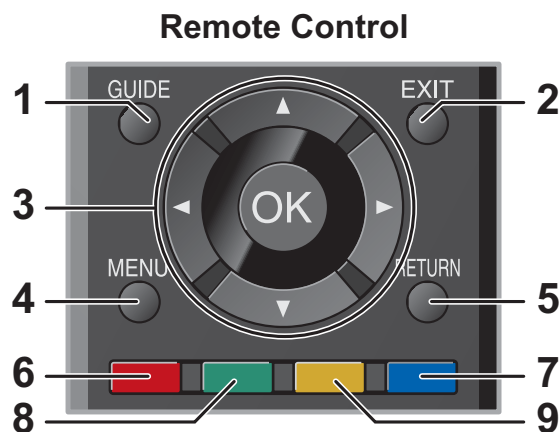
1. In the **HDMI CEC Control** menu, press ▲ or ▼ to select **Speaker Preference** when **Amplifier Control** is **On**.
2. Press ◀ or ▶ to select **TV Speakers** or **Amplifier**.

Note: This function is only available when the TV is connected to audio receivers that support CEC function.

HDMI CEC Playback Device Control

This is a new feature that uses CEC technology and allows you to control **HDMI CEC** compatible devices from the TV remote control via HDMI connection.

When there are two or more **HDMI CEC** devices connected to the television, the device selection menu appears. Highlight the desired device, and then press **OK** to select.



Note:

- Press **▲** or **▼** to select **HDMI CEC Control** in the **Quick access** menu, and then press **OK**. The **Pass-Through Control Panel** appears.
- Some functions are only available when the **Pass-Through Control Panel** is displayed on the screen. Please refer to the following procedure.
- Please refer to the **Remote Control** image and the following table for the key definitions of the **Pass-Through Control Panel**.
- **MENU** and **RETURN** functions are unavailable when the **Pass-Through Control Panel** is on.

No	Item	Description
When opening the Pass-Through Control Panel :		
1	GUIDE	Turn off the desired HDMI CEC device.
2	EXIT	Close the Pass-Through Control Panel .
3	▲	Pause.
	▼	Stop.
	◀	Rewind.
	▶	Forward.
	OK	Play.
4	MENU	Skip Reverse.
5	RETURN	Skip Forward.
6	ROOT	Root key.
7	DVD	DVD key.
8	CONTENTS	Contents key.
9	TOP	Top key.
In contents menu:		
3	▲, ▼, ◀, ▶	Navigate contents menu.
	OK	Enter contents menu, etc.

Note: These functions depend on the devices connected.

Using MHL TV function

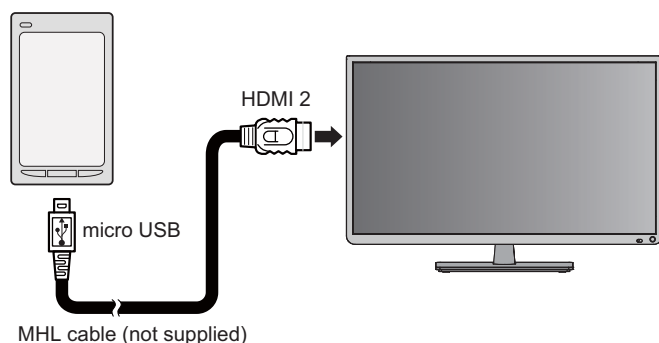
You can use the following functions by connecting between the TV HDMI 2 port and micro USB port of mobile phones etc. with a MHL cable.

- Charge with mobile phone from TV
- Video/Audio output from mobile phone
- Access mobile content through TV remote controller
- Supports transfer of HD video resolution up to 1080p
- MHL functions may not perform properly as some mobile devices may not incorporate the full MHL functionality

Note: These functions may not be available depending on the connected equipment.

Connecting an MHL-compatible Device

Connect the device to the HDMI 2 port on the TV using an MHL cable (not supplied).

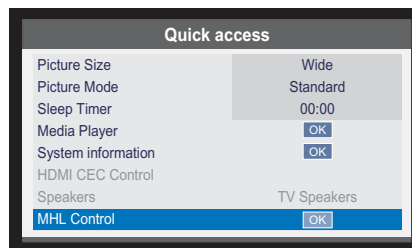


When you connect an MHL-compatible device to the HDMI 2 port on the TV with the MHL cable, charging starts automatically.

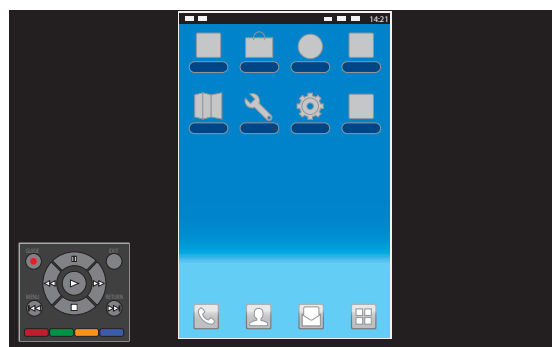
Note: Do not connect an MHL-compatible device to any port other than the HDMI 2 port.

MHL Control

1. Press **QUICK**. Press **▲** or **▼** to select **MHL Control** and press **OK**.



2. The **Pass-Through Control Panel** appears.



Note: The **Pass-Through Control Panel** is only available when viewing photo/video or listening to music.

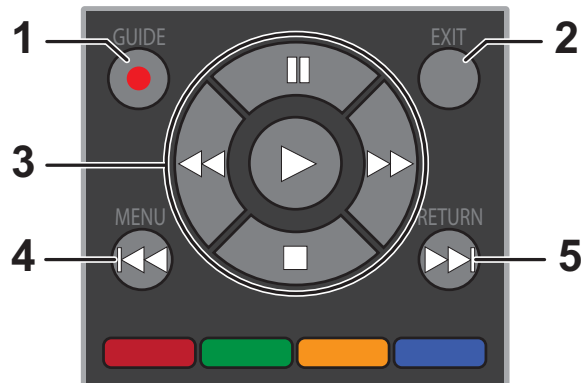
Operating an MHL-compatible Device

MHL is a new mobile audio video interface standard for direct connection with MHL enabled mobile devices to MHL enabled TVs, providing instant access to a wealth of mobile content with ease of control through the TV remote controller.

Remote Control



Pass-Through Control Panel



No	Item	Description
Not entry MHL Control (Remote Control)		
2	EXIT	Exit.
3	In contents menu:	
	▲	Up.
	▼	Down.
	◀	Left.
	▶	Right.
	ⓄK	Select.
5	RETURN	Exit.
Entry MHL Control (Pass-Through Control Panel)		
1	GUIDE	Record.
2	EXIT	Close the Pass-Through Control Panel .
3	When viewing the video or listening to music:	
	▲	Pause.
	▼	Stop.
	◀	Rewind.
	▶	Forward.
	ⓄK	Play.
4	MENU	Skip Reverse.
5	RETURN	Skip Forward.

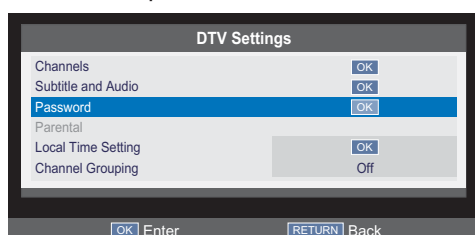
Parental control

Password

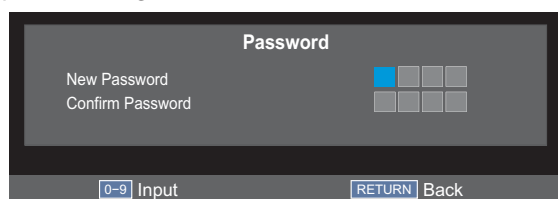
Change the 4-digit parental control password.

The factory default password is "0000".

1. In the **DTV Settings** menu, press ▲ or ▼ to select **Password**, and press **OK** to enter the submenu.



2. Enter a new 4-digit password, and re-enter the new password again to confirm.



Note: "0000" cannot be used.

Programme Lock

This function blocks channels or programmes that you do not want to or that you do not want your children to watch.

A password is required to access this function.

The factory default password is "0000".

Note: When **Parental Control** is activated, you will need to enter the 4-digit password before you enter the **DTV Settings** submenu under the **SETUP** menu. After auto tuning, all the channel blocks will be cleared.

1. In the **DTV Settings** menu, press ▲ or ▼ to select **Parental**, and press **OK** to enter the submenu.
2. Enter the 4-digit password.
3. Press ◀ or ▶ to set the age rating from age 4~18 or select **None** to turn this function off or **Block All**.

Note: This function is available for programmes with Age Rating information.

Media Player

Enjoy Photos through USB Port

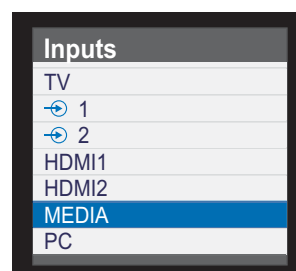
The Photo Viewer allows you to playback image files from a USB storage device.

Image	Photo	Resolution
JPEG	Base-line	15360x8704 (1920x8 x 1088x8)
	Progressive	1024x768
PNG	non-interface	9600x6400
	interface	1200x800
BMP		9600x6400

View Photo Files

1. Insert a USB storage device and press **⏻** on the remote.

Use ▲ or ▼ to select **MEDIA** and press **OK**.

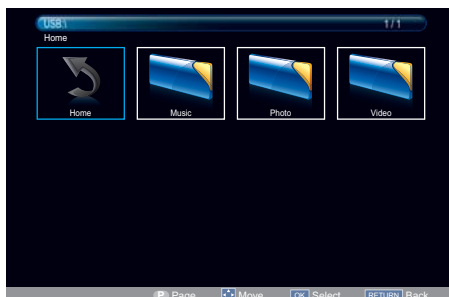


2. Press ◀ or ▶ to select **Photo** and press **OK** to enter the submenu.

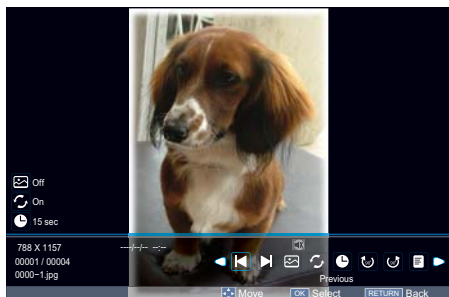


Using the TV's features (General)

- Press ▲, ▼, ◀ or ▶ to select the folder you wish to view and press **OK** to enter.
Press **P** ▲ or **P** ▼ to page up or down.



- Press ▲, ▼, ◀ or ▶ to select the desired photo and press **OK** to view.
- Press **MENU** to change the settings when viewing a photo.



Press ◀ or ▶ to:

- ◀: Go to the previous photo
- ▶: Go to the next photo
- ☐: Select slide show mode
- 🔄: Select repeat mode
- 🕒: Select the desired interval time
- 🕒: Clockwise rotation 90°
- 🕒: Counterclockwise rotation 90°
- 📄: Show play list
- 🎵: Set the background music
- ℹ️: Photo information

and press **OK** to confirm the setting.

Using Slide Show

This view allows you to watch a slide show of the photos. In this view mode, the only content that locates on the same directory shall be played.

- Press **MENU** to change the settings when viewing a photo.
- Press ◀ or ▶ to select ☐ and press **OK** to turn **On** or **Off**.

Note: If **Repeat** is **On**, slide show starts photo viewing from the first photo in the folder after reaching the final photo.

Repeat Settings for Slideshow

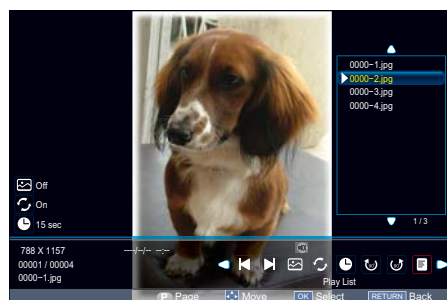
- Press **MENU** to change the settings when viewing a photo.
- Press ◀ or ▶ to select 🔄 and press **OK** to turn **On** or **Off**.

Set Interval Time

- Press **MENU** to change the settings when viewing a photo.
- Press ◀ or ▶ to select 🕒 and press **OK** to select the desired interval time (3/5/10/15/30/60/90 Sec).

Using the Play List

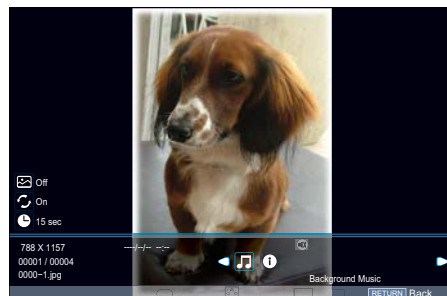
- Press **MENU** to change the settings when viewing a photo.
- Press ◀ or ▶ to select 📄 and press **OK**.
- Press ▲ or ▼ to select a photo and press **OK** to show the photo.
Press **RETURN** on the remote to collapse the list.




Background Music

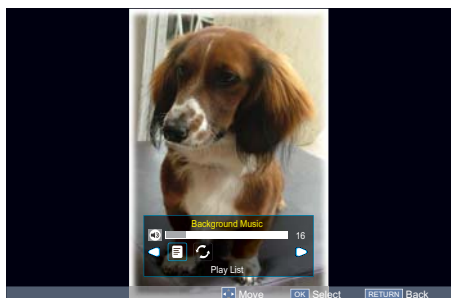
Set the background music when viewing photo.


- Press **MENU** to change the settings when viewing a photo.
- Press ◀ or ▶ to select 🎵 and press **OK**.



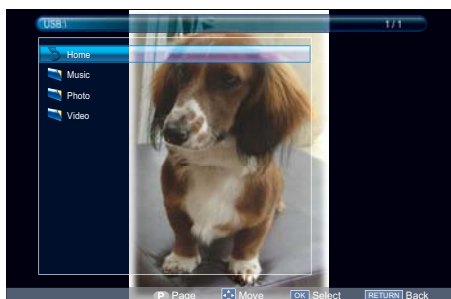
Using the TV's features (General)

3. Press ◀ or ▶ to select  and press .



Press ▲ or ▼ to select music and press  to play music.

Press **RETURN** on the remote to collapse the list.



4. Press ◀ or ▶ to select  and press  to select **One** or **Folder**.

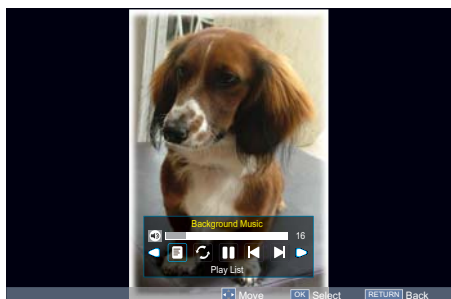


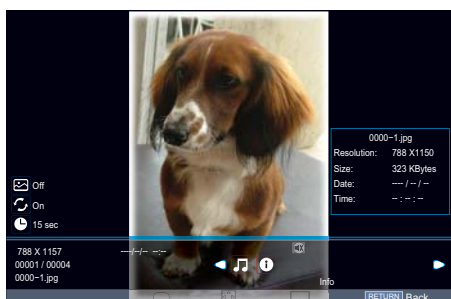



Photo Info

Info displays the file status information (content number, photo title, shooting date and time, resolution etc.).

- Press **MENU** to change the settings when viewing a photo.
- Press ◀ or ▶ to select  and press .




3. The information will be removed by time-out (about 15 sec) or press .

Enjoy Music through USB Port

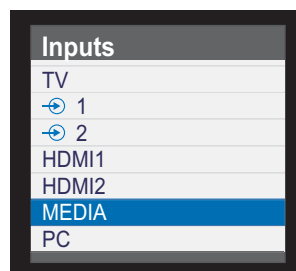
The MP3 Player allows you to playback music files from a USB storage device.


Audio Codec	File Extension	Bit Rate
MPEG1 Layer2	MP3	Bit Rate: 8Kbps ~ 384Kbps Sampling rate: 16KHz ~ 48KHz
MPEG1 Layer3	MP3	Bit Rate : 8Kbps ~ 320Kbps Sampling rate : 16KHz ~ 48KHz

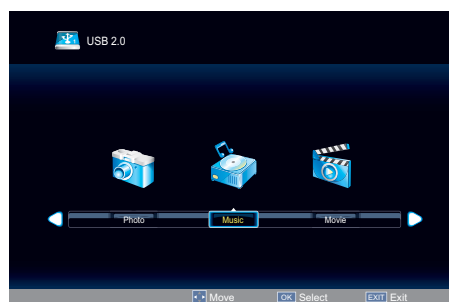
Play Music Files


- Insert a USB storage device and press  on the remote.

Use ▲ or ▼ to select **MEDIA** and press .

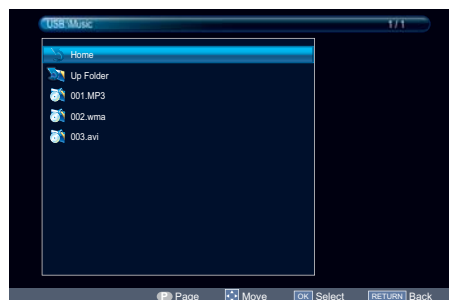


- Press ◀ or ▶ to select **Music** and press  to enter the submenu.



- Press ▲ or ▼ to select the folder you wish to play and press  to enter.

Press **P** ^ or **P** v to page up or down.



Using the TV's features (General)

- Press ▲ or ▼ to select the desired music and press **OK** to play.



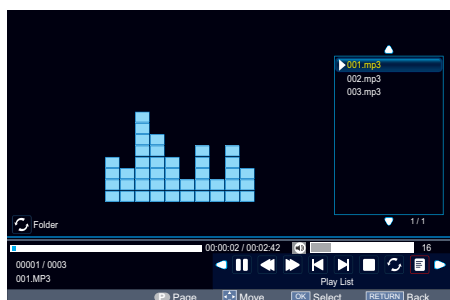
- Press **MENU** to change the settings when listening music, press ◀ or ▶ to:
 - ▶/⏸: Play or pause the selected music
 - ◀: Rewind the selected music
 - ▶: Fast forward the selected music
 - ⏮: Go to the previous music
 - ⏭: Go to the next music
 - ⏹: Stop play
 - ⏮: Select the desired repeat interval:
 - Repeat Off
 - Repeat One: Repeat the selected music once
 - Repeat Folder: Repeat all music files in the selected folder
 - 📄: Show play list
 - ℹ: Music information
 and press **OK** to confirm the setting.

Repeat Settings

- Press ◀ or ▶ to select **Repeat**.
- Press **OK** to select **Off**, **One** or **Folder**.

Using the Play List

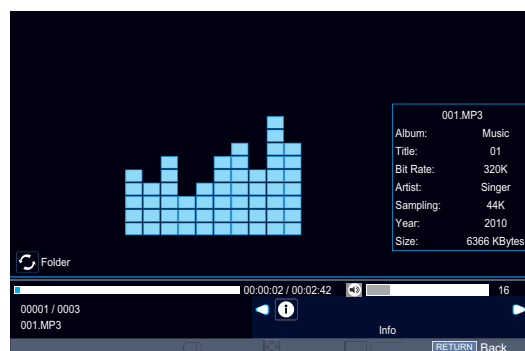
- Press ◀ or ▶ to select **Play List** and press **OK**.
- Press ▲ or ▼ to select music and press **OK** to play music.
Press **EXIT** on the remote to collapse the list.



Music Info

Info display file status information (content number, music title, Bit Rate, Artist, Sampling, Year, and size).

- Press ◀ or ▶ to select **Info** and press **OK**.



- The information will be removed by time-out (about 15 sec) or press **OK** to exit.


Enjoy Videos through USB Port

The Video Viewer allows you to playback video files from a USB storage device.

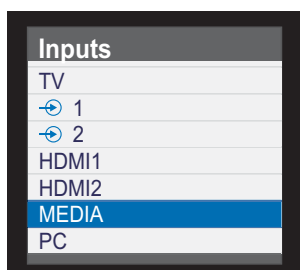
Note: USB 2.0 or above is recommended for best media performance.

File Extension	Container	Video Codec	SPEC	Bit Rate (Mbit/sec)	Profile	Remark
dat, mpg, mpeg	MPEG	MPEG1 MPEG2	1080P@ 30fps	40	MPEG2: Main Profile@High Level	MP4: GMC is not supported * Some files may not be played.
ts, trp, tp	MPEG2-TS H.264-TS	H.264 MPEG2	H.264: 1080P@50fps Others: 1080P@30fps	40	H.264: Main Profile and High Profile@Level 4.1 MPEG2: Main Profile@High Level	
vob	MPEG2-PS	MPEG2	1080P@ 30fps	40	MPEG2: Main Profile@High Level	
mp4, m4v	MP4	H.264 MPEG4	H.264: 1080P@50fps Others: 1080P@30fps	40	H.264: Main Profile and High Profile@Level 4.1 MPEG4: Simple Profile and Advanced Simple Profile@Level 5	
mkv	MKV	H.264 MPEG1 MPEG2 MPEG4	H.264: 1080P@50fps Others: 1080P@30fps	40	H.264: Main Profile and High Profile@Level 4.1 MPEG2: Main Profile@High Level MPEG4: Simple Profile and Advanced Simple Profile@Level 5	
divx, div	AVI (1.0, 2.0) DMF0, 1, 2	DivX 3.11 DivX 4.12 DivX 5.x DivX 6	1080P@ 30fps	40	MPEG4: Simple Profile and Advanced Simple Profile@Level 5	
avi	AVI (1.0, 2.0) DMF0, 1, 2	H.264 MPEG1 MPEG2 MPEG4 DivX 3.11 DivX 4.12 DivX 5.x DivX 6	H.264: 1080P@50fps Others: 1080P@30fps	40	H.264: Main Profile and High Profile@Level 4.1 MPEG2: Main Profile@High Profile MPEG4: Simple Profile and Advanced Simple Profile@Level 5	
	AVI (1.0, 2.0)	MJPG (Motion JPEG)	640x480@ 30fps	10		
flv	flash formats	H.264 Sorenson H.263	H.264: 1080P@50fps Others: 1080P@30fps	40	H.264: Main Profile and High Profile@Level 4.1	

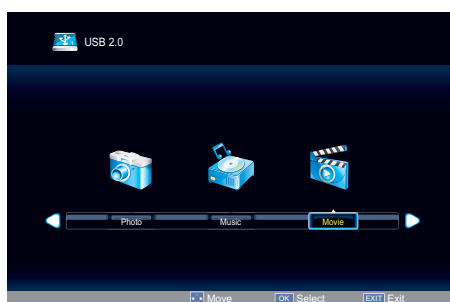
Play Video Files




1. Insert a USB storage device and press  on the remote.

Use  or  to select **MEDIA** and press .

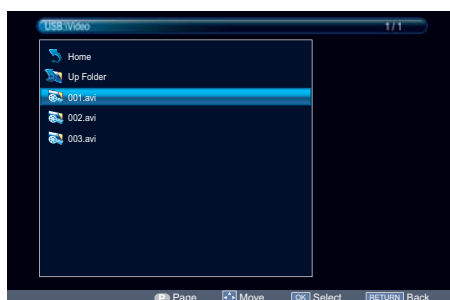





2. Press  or  to select **Movie** and press  to enter the submenu.



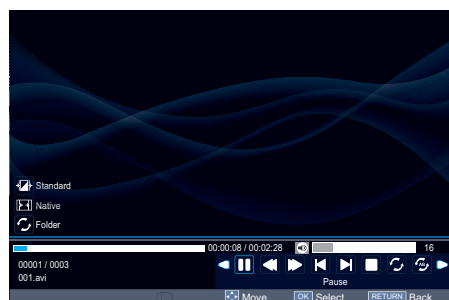
3. Press  or  to select the folder you wish to view and press  to enter.

Press  or  to page up or down.



















4. Press  or  to select the desired video and press  to play.

5. Press **MENU** to change the settings when viewing a video.







Press  or  to:





- : Play or pause the selected video
- : Fast back the selected video
- : Fast forward the selected video
- : Go to the previous video
- : Go to the next video
- : Stop play
- : Select the desired repeat interval:
 - Repeat Off
 - Repeat One: Repeat the selected video once
 - Repeat Folder: Repeat all video files in the selected folder
- : Repeat from A to B
 - Set A: A-Set
Repeat and Start
 - Set B: B-Set
Repeat and repeat from A to B
- : Show play list
- : Video information
- : Slow forward the selected video
- : Step forward the selected video
- : Aspect Ratio
- : Picture Mode
- : Allows you to input a search time

and press  to confirm the setting.

Repeat Settings


1. Press **MENU** to change the settings when viewing a video.
2. Press  or  to select  and press  to select **Off**, **One** or **Folder**.

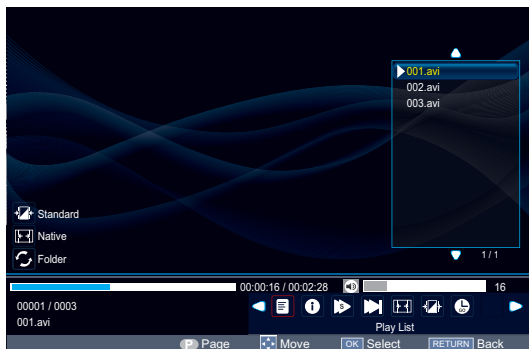
Set

1. Press **MENU** to change the settings when viewing a video.
2. Press  or  to select  and press  to select **Set A**, **Set B** or **None**.

Using the TV's features (General)


Using the Play List

1. Press **MENU** to change the settings when viewing a video.
2. Press ◀ or ▶ to select  and press **OK**.
3. Press ▲ or ▼ to select a video and press **OK** to play the video.
Press **RETURN** on the remote to collapse the list.




Slow Forward

The feature changes forward speeds.

1. Press **MENU** to change the settings when viewing a video.
2. Press ◀ or ▶ to select  and press **OK** to select **SF2X**, **SF4X**, **SF8X**, **SF16X** or **Play**.


Step Forward

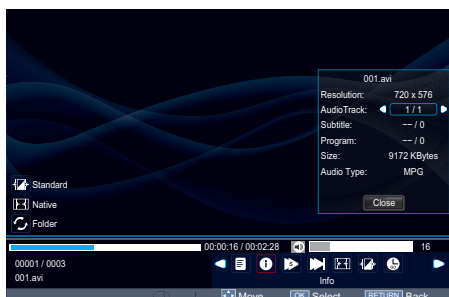
The feature allows you to view a video one frame at a time.

1. Press **MENU** to change the settings when viewing a video.
2. Press ◀ or ▶ to select  and press **OK** to play step by step.

Video Info


Info display file status information (content number, video title, audio track, subtitle, program, size, etc.).

1. Press **MENU** to change the settings when viewing a video.
2. Press ◀ or ▶ to select  and press **OK**.




3. The information will be removed by time-out (about 15 sec) or press **OK** to exit.

Aspect Ratio


1. Press **MENU** to change the settings when viewing a video.
2. Press ◀ or ▶ to select  and press **OK** to select **Native**, **4:3** or **16:9**.

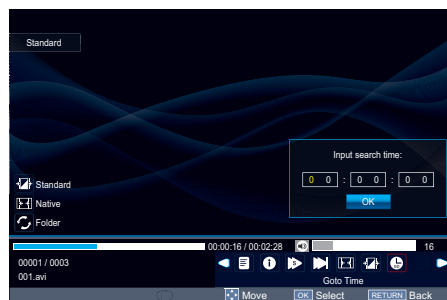
Picture Mode

1. Press **MENU** to change the settings when viewing a video.
2. Press ◀ or ▶ to select  and press **OK** to select **Standard**, **Mild**, **Movie** or **Dynamic**.

Goto Time

The feature allows you to view a selected time during the video.

1. Press **MENU** to change the settings when viewing a video.
2. Press ◀ or ▶ to select  and press **OK**.
3. Use the number key pad on the remote to enter time. Press **OK** to go to the input time.

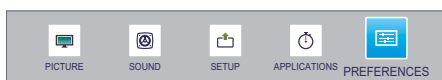


Preference Control

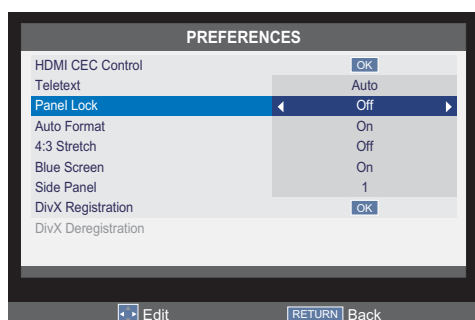
Panel Lock

Panel Lock disables the buttons on the television. All buttons on the remote control can still be used.

1. Press **MENU**. Press ◀ or ▶ to select **PREFERENCES** and press **OK** to enter the submenu.



2. Press ▲ or ▼ to select **Panel Lock** and press ◀ or ▶ to select **On** or **Off**.



When **Panel Lock** is **On**, a reminder will appear when the buttons on the television are pressed. If the standby button is pressed the television will switch off and can only be brought out of standby by using the remote control.

Auto Format (Widescreen)

When this television receives a true Widescreen picture and **Auto format** is **On**, it will automatically be displayed in Widescreen format, irrespective of the television's previous setting.

1. In the **PREFERENCES** menu, press ▲ or ▼ to select **Auto Format**.
2. Press ◀ or ▶ to select **On** or **Off**.

4:3 Stretch

When **4:3 Stretch** is activated, this function will switch 4:3 format programmes into a full screen picture.

1. In the **PREFERENCES** menu, press ▲ or ▼ to select **4:3 Stretch**.
2. Press ◀ or ▶ to select **On** or **Off**.

Note: In HDMI signal format, this function is available.

Blue Screen

When **Blue Screen** is selected, the screen will turn blue when no signal is received.

1. In the **PREFERENCES** menu, press ▲ or ▼ to select **Blue Screen**.
2. Press ◀ or ▶ to select **On** or **Off**.

Note: This function is not available in DTV mode.

Side Panel

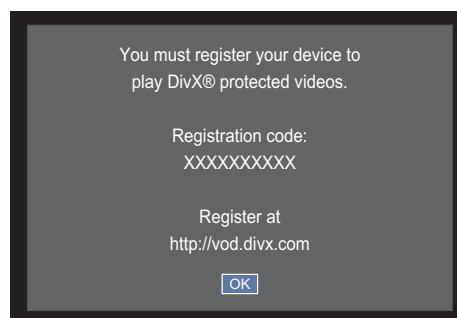
The **Side Panel** feature lightens or darkens the band each side of the screen when in 4:3 or 14:9 format. This helps prevent image retention of the band and can also make viewing in bright or dark conditions more comfortable.

1. In the **PREFERENCES** menu, press ▲ or ▼ to select **Side Panel**.
2. Press ◀ or ▶ to adjust the settings as required.

DivX Registration

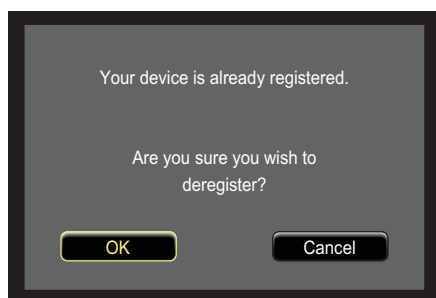
View the registration code that is required to play video files that are compatible with the DivX® VOD (Video On Demand) service on the TV. DivX® VOD is a video delivery service that lets you rent or purchase video content recorded in DivX® format. To play video files that are compatible with the DivX® VOD service, the TV needs to be registered as a DivX® player.

1. In the **PREFERENCES** menu, press ▲ or ▼ to select **DivX Registration** and press **OK**.

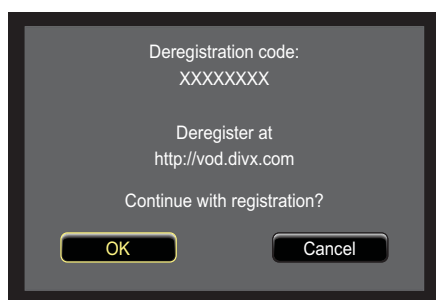


DivX Deregistration

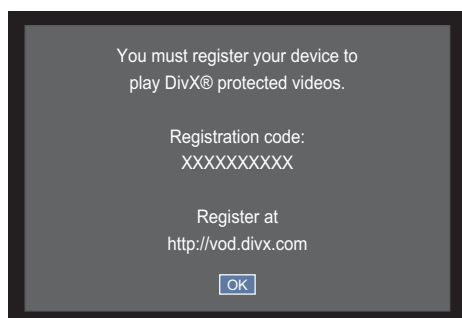
1. In the **PREFERENCES** menu, press ▲ or ▼ to select **DivX Deregistration** and press **OK**.
2. Press ◀ or ▶ to select **OK** to confirm or select **Cancel** to exit and press **OK**.



3. Press ◀ or ▶ to select **OK** to confirm or select **Cancel** to exit and press **OK**.



4. Press **OK** to exit.



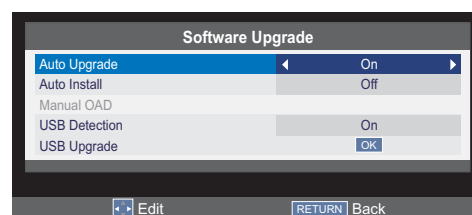
System Upgrade

1. Press **MENU**. Press ◀ or ▶ to select **SETUP** and press **OK** to enter the submenu.

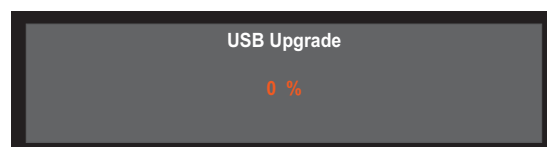


2. Press ▲ or ▼ to select **SoftwareUpgrade** and press **OK** to enter the submenu.

3. Press ▲ or ▼ to select **Auto Upgrade** and press ◀ or ▶ to select **On** or **Off**.



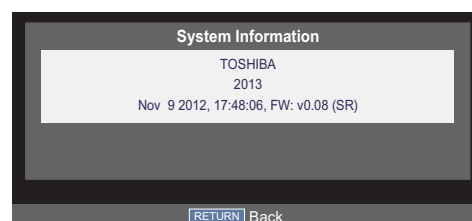
4. Insert a USB storage device. Press ▲ or ▼ to select **USB Upgrade** and press **OK** to start upgrading the firmware.



Note: Firmware upgrading is suggested to be done by the professional service personnel.

System Information

In the **SETUP** menu, press ▲ or ▼ to select **System Information** and press **OK** to display the model information and firmware version.



Subtitle and Audio

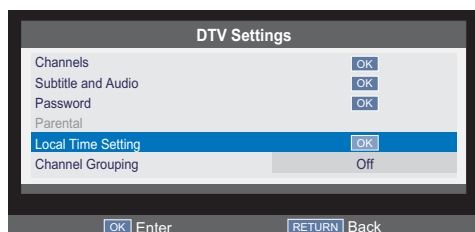
You can choose the **Subtitle Type** or **Audio Type** from **Normal** or **Hearing Impaired**. If the **Hearing Impaired** is selected, it provides subtitle services to deaf and hard of hearing viewers with additional descriptions.

Subtitle Language or **Audio Language** allow a programme or film to be viewed with a choice of soundtrack language, provided they are currently being broadcast.

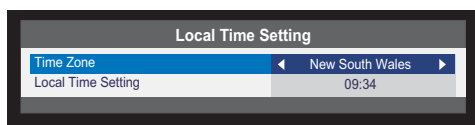
1. In the **DTV Settings** menu, press ▲ or ▼ to select **Subtitle And Audio**, and press **OK** to enter the submenu.
2. Press ▲ or ▼ to select **Subtitle Display** and press ◀ or ▶ to select **On** or **Off**.
3. Press ▲ or ▼ to select **Subtitle Type** or **Audio Type** and press ◀ or ▶ to select **Normal** or **Hearing Impaired**.
4. Press ▲ or ▼ to select **Digital Subtitle Language**, **Digital Subtitle Language 2nd**, **Audio Language** or **Audio Language 2nd** and press ◀ or ▶ to select your preferred language.

Local Time Setting

1. In the **DTV Settings** menu, press ▲ or ▼ to select **Local Time Setting**, and press **OK** to enter the submenu.



2. Press ▲ or ▼ to select **Time Zone** and use ◀ or ▶ to select your region.



3. Press ▲ or ▼ to select **Local Time Setting** and use ◀ or ▶ to set the time.

Channel Grouping

There are Video, Radio and Text services combined in a channel list for DTV services. The function provides the selection of channel change with one service group or among all services by pressing **P** ^ and **P** v.

1. In the **DTV Settings** menu, press ▲ or ▼ to select **Channel Grouping**.
2. Press ◀ or ▶ to select **On** or **Off**.
3. When **Channel Grouping** is **On**, the channel change by **P** ^ and **P** v will be within a single service group, press **ATV/DTV** on the remote control can be still used for change services among ATV, DTV Video, DTV Radio and DTV Text.

Programme Guide

The programme guide gives access to programme details for all available channels.

Guide

1. Select the on-screen guide by pressing **GUIDE**. The guide screen will appear highlighting details of the channel and programme currently being viewed. This may take a few moments to appear.
2. Press ◀ or ▶ for information on other programmes scheduled for the channel selected.
3. For details of other programmes currently available, press ▲ and ▼ to scroll up and down the channel list.

Note: In order for the recording operation to work properly, the media recorder must be set to the same time as the TV. Regarding the process for recording, please refer to the owner's manual of the recording equipment.

EPG

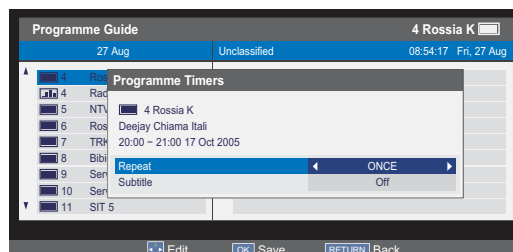
EPG (Electronic Programme Guide) supports 9 sets of timers. You can set or cancel a timer for a selected programme within the guide. When the TV is on and the timer activates, a dialogue box is shown informing you that the programme is about to start. When the TV is in standby mode and the timer activates, the TV will wake up with backlight on, speaker on, and change to the channel selected.

You must set the time correctly before using this function. All set timers are cleared when performing a new channel scan.

1. Press **GUIDE** on the remote to display the **Programme Guide**.



2. Press ▲ or ▼ to select the desired channel and press **OK** to enter the programme schedule.
3. Press ▲ or ▼ to select the desired programme and press **OK** to enter the **Tune** menu.



Press ▲ or ▼ to select **Repeat** or **Subtitle** and press ◀ or ▶ to adjust the settings as required.

Press **OK** to save the settings.

4. Press the blue button on the remote to enter the **Timer List** menu.



Using the TV's features (General)

- Press ▲ or ▼ to select the desired programme and press **OK** to edit.

Note: Press the red button on the remote to delete the timer.

Press ▲ or ▼ to select **Channel**, **Date**, **Start Time**, **End Time**, **Repeat** or **Subtitle** and press ◀ or ▶ to adjust the settings as required.

Press **OK** to save the settings.

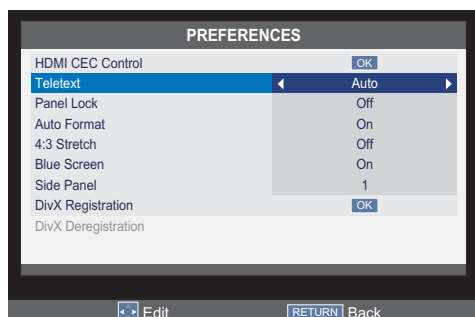
Note: After adjustment, the TV clock may not match the time in the EPG Programme Guide. The EPG Programme Guide time follows the broadcast stream time which can not be adjusted.

Teletext

This television has a multi-page text memory, which takes a few moments to load.

Setting the Modes

- In the **PREFERENCES** menu, press ▲ or ▼ to select **Teletext**.



- Press ◀ or ▶ to select **Auto** or **LIST**.

Navigating Pages using Auto

If Fastext is available, four coloured titles will appear at the base of the screen.

To access one of the four given subjects, press the relevant coloured button on the remote control.

For further information on your particular text system(s), see the broadcast text index page or, consult your local Toshiba dealer.

Navigating Pages using LIST

If Fastext is available, four coloured titles with numbers 100, 200, 300 and 400 have been programmed into the television's memory.

To view these pages press the relevant coloured buttons.

To change these stored pages press the relevant coloured button and enter a new 3 digit number. This number will change in the top left of the screen and in

the coloured highlight. Press **OK** to store. The bars at the bottom of the screen will flash white. Whenever **OK** is pressed all four page numbers showing at the bottom will be stored and the previous ones will be lost.

If **OK** is not pressed the selection will be forgotten when text is cancelled.

Other pages may be viewed by entering the 3 digit page number – but DO NOT press **OK** or these pages will be stored.

Control Buttons

Below is a guide to the functions of the remote control text buttons.

[Index Icon] Displays the index/initial page:

Press **[Index Icon]** to access the index/initial page. The page displayed is dependent on the broadcaster.

[Question Mark Icon] Reveals concealed text:

To discover the solutions on quiz and joke pages press the **[Question Mark Icon]** button.

[Hold Icon] Holds a wanted page:

At times it is convenient to hold a page of text.

Press **[Hold Icon]** and **[Hold Icon]** will appear in the top left of the screen. The page will be held on-screen until the button is pressed again.

[Enlarge Icon] Enlarges the text display size:

Press **[Enlarge Icon]** once to enlarge the top half of the page, press again to enlarge the bottom half of the page. Press again to revert to normal size.

[Clock Icon] Selects a page while viewing a normal picture:

Enter the page number then press **[Clock Icon]**, a normal picture will be displayed. The television will indicate when the page is present by displaying the page number at the top of the screen.

To display news flashes:

Select the news flash page for the chosen text service (see the index page of your text service).

By pressing **[Clock Icon]**, news flashes will be displayed as and when they are broadcast. Press **[Clock Icon]** again to cancel the display.

How to change the page:

Press ▲ or ▼ to change the page.

Press ◀ or ▶ to change the sub page when a sub page is available.

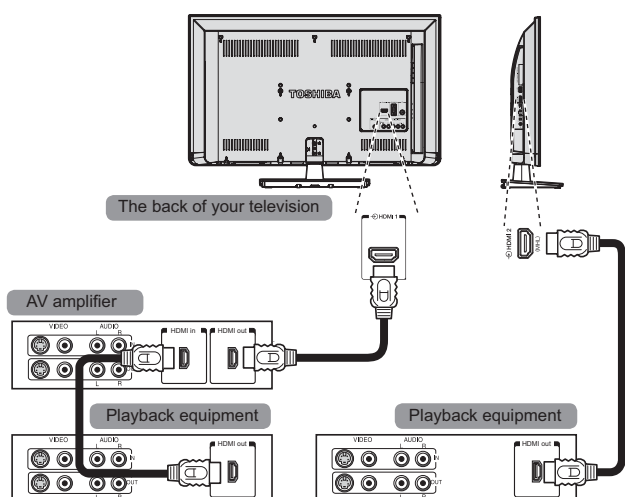
The news flash page must be cancelled before changing channels.

Connecting your TV

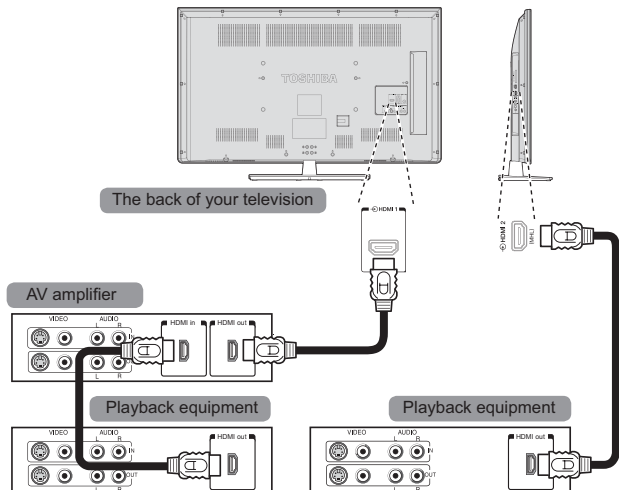
HDMI CEC Connections

The basic functions of connected audio/video equipment can be controlled using the television's remote control if a HDMI CEC compatible device is connected.

32W2300A | 39L2300A



50L2300A



Connecting an HDMI or a DVI device

The HDMI input on your television receives digital audio and uncompressed digital video from an HDMI source device or uncompressed digital video from a DVI (Digital Visual Interface) source device.

This input is designed to accept HDCP (High-Bandwidth Digital-Content Protection) programme material in digital form from EIA/CEA-861-D-compliant [1] consumer electronic devices (such as a set-top box or DVD player with HDMI or DVI output). **For acceptable video signal formats** (see page 49 [Accepted Video signals through HDMI terminals](#))

Note:

- Some early HDMI equipment may not work properly with your latest HDMI TV, due to the adoption of a new standard.
- Supported Audio format: Linear PCM and Dolby Digital, sampling rate 32/44.1/48kHz.

To connect an HDMI device

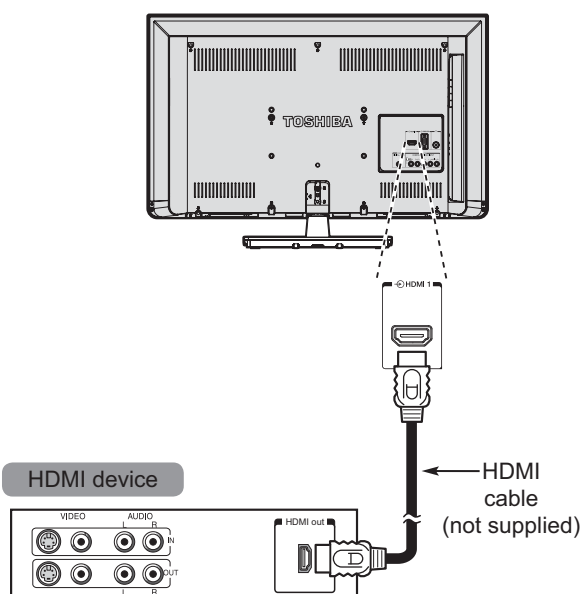
Connect an HDMI cable (type A connector) from the device to the HDMI terminal.

For proper operation, it is recommended that you use an HDMI cable with the HDMI Logo (**HDMI**®).

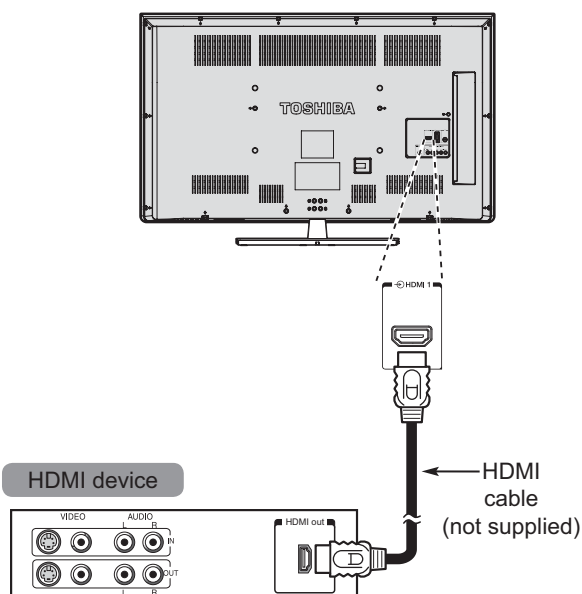
- If your HDMI connection is capable of 1080p and/or your television is capable of refresh rates greater than 50Hz, you will need a Category 2 cable. Conventional HDMI/DVI cable may not work properly with this mode.
- HDMI cable transfers both video and audio. Separate analogue audio cables are not required (see illustration).


Connecting your TV

32W2300A | 39L2300A



50L2300A



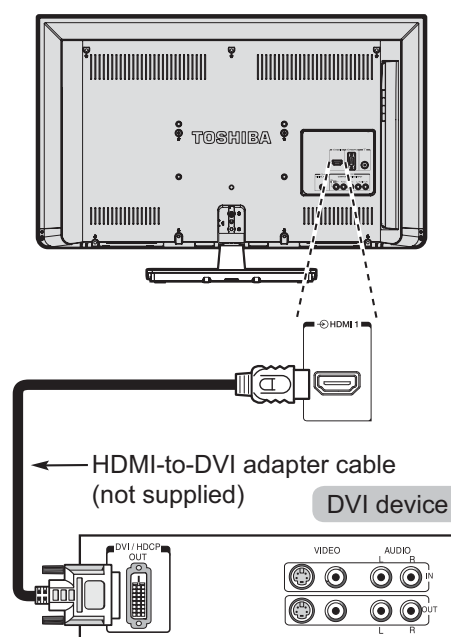
To view the HDMI device video, press the  button to select HDMI 1 or HDMI 2 mode.

To connect a DVI device

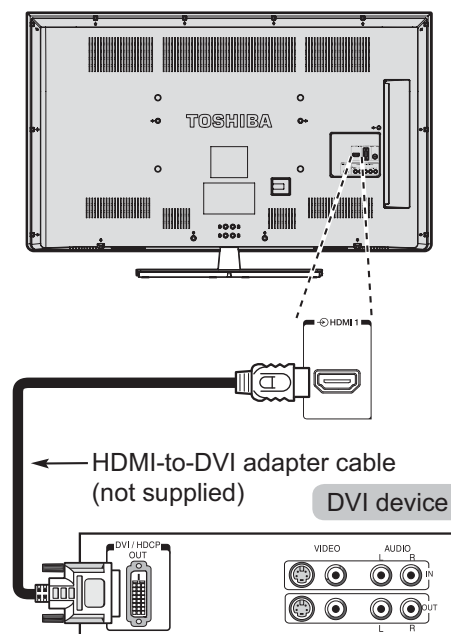
Connect an HDMI-to-DVI adapter cable (HDMI type A connector) to the HDMI 1.

- The maximum recommended HDMT – DVI cable length is 6.6ft (2m).
- An HDMI-to-DVI adapter cable transfers video only.
- Separate analogue audio connection are not supported for audio receivers.

32W2300A | 39L2300A



50L2300A



To ensure that the HDMI or DVI device is reset properly, it is recommended that you follow these procedures:

- When turning on your electronic components, turn on the television first, and then the HDMI or DVI device.
- When turning off your electronic components, turn off the HDMI or DVI device first, and then the television.

Note: HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

Connecting a computer

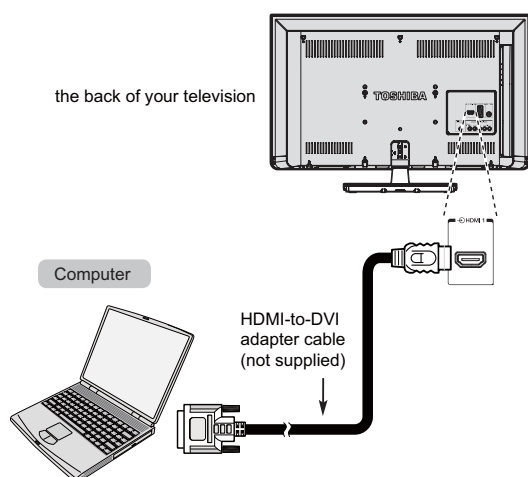
With either an RGB/PC or an HDMI connection, you can watch your computer's display on the television.

To connect a PC to the HDMI terminal

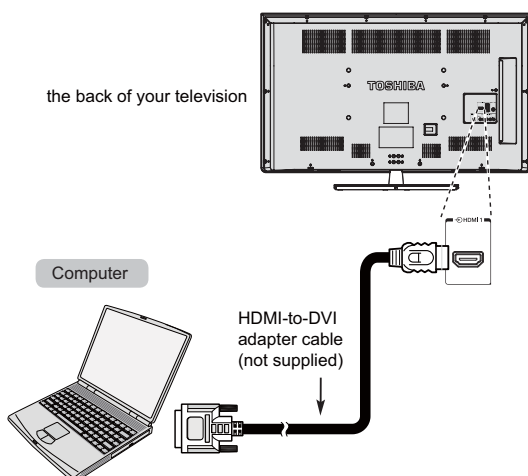
When connecting a PC to the HDMI terminal on the television, use an HDMI-to-DVI cable.

If connecting a PC with an HDMI terminal, use an HDMI cable (type A connector). A separate analogue cable is not necessary.

32W2300A | 39L2300A



50L2300A



For acceptable PC and video signal formats
(page 49 Accepted PC signals through HDMI terminals)

Note:

- The edges of the images may be hidden.
- If connecting a certain PC model with a unique PC signal, the PC signal may not be detected correctly.

Using the PC setting

- Most of the picture controls and functions are available. However features not available will be greyed out.
- In the PC input mode, the **Manual Setting** is not displayed.
- First press until the video input mode list appears on the screen, then press or and in order to select the PC input mode.
- This function may not be available for some signal or if no signal is received.
- The optimum points of the clock phase and sampling clock adjustments may be incomprehensible according to the input signals.

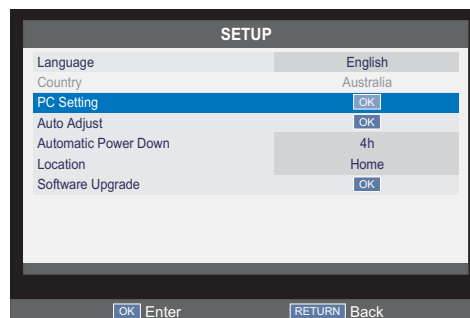
Horizontal and Vertical Position

Connect the PC (as shown in the page 47 Connecting a computer) and ensure that a picture is showing on the television screen. The picture position may now be adjusted to suit personal preference.

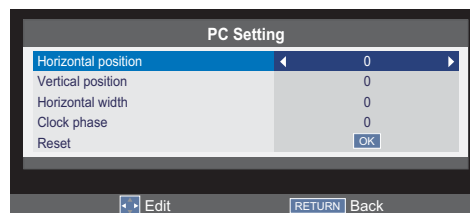
1. Press **MENU**. Press or to select **SETUP** and press to enter the submenu.



2. Press or to select **PC Setting**, and press to enter the submenu.



3. Press or to select **Horizontal position** or **Vertical position** and press or to adjust the settings as required.



Horizontal Width

1. In the **PC Setting** menu, press ▲ or ▼ to select **Horizontal width**.
2. Press ◀ or ▶ to adjust the settings as required.

Clock Phase

The **Clock phase** matches the PC signal with the LCD display.

Adjusting this can clear horizontal stripes and picture blur.

1. In the **PC Setting** menu, press ▲ or ▼ to select **Clock phase**.
2. Press ◀ or ▶ to obtain a clear picture.

Reset

This feature resets all PC settings to the factory settings.

Note: If any PC settings have not been changed, **Reset** is not available.

1. In the **PC Setting** menu, press ▲ or ▼ to select **Reset**.
2. Press (OK).

Note:

- When a PC is connected using HDMI none of these functions will be available.
- The screen is disrupted momentarily when adjusting PC setting. This is not a sign of malfunction.
- The default settings and adjustment ranges may vary depending on the input signal format.

Auto Adjust for PC

Adjust Horizontal position, Vertical position, Horizontal Clock, and Clock phase automatically. Depending on the type of the signal, there is a possibility that the display may not be adjusted in its optimum condition with this function. In that case, please adjust each item manually.

1. Press **MENU**. Press ◀ or ▶ to select **SETUP**.
2. Press ▲ or ▼ to select **PC Setting**, and press (OK).

Accepted Video signals through HDMI terminals

Resolution	H. Frequency (KHz)	V. Frequency (Hz)
480i	15.750	60.000
480p	31.500	60.000
576i	15.625	50.000
576p	31.250	50.000
720p	37.500	50.000
720p	45.000	60.000
1080i	28.125	50.000
1080i	33.750	60.000
1080p	27.000	24.000
1080p	28.125	25.000
1080p	33.750	30.000
1080p	56.250	50.000
1080p	67.500	60.000

Accepted PC signals through HDMI terminals

Resolution	H (KHz)	V(Hz)	Pixel Clock (MHz)	H-Polarity	V-Polarity	H-Total	V-Total
640 x 480	31.469	59.940	25.175	Negative	Negative	800	525
640 x 480	37.861	72.809	31.500	Negative	Negative	832	520
640 x 480	37.500	75.000	31.500	Negative	Negative	840	500
800 x 600	35.160	56.250	36.000	Positive	Positive	1024	625
800 x 600	37.879	60.317	40.000	Positive	Positive	1056	628
800 x 600	48.077	72.188	50.000	Positive	Positive	1040	666
800 x 600	46.875	75.000	49.500	Positive	Positive	1056	625
1024 x 768	48.363	60.004	65.000	Negative	Negative	1344	806
1024 x 768	60.023	75.029	78.750	Positive	Positive	1312	800
1280 x 768	47.776	59.870	79.500	Negative	Positive	1664	798
1360 x 768	47.712	60.015	85.500	Positive	Positive	1792	795
1280 x 1024	63.981	60.020	108.000	Positive	Positive	1688	1066
1280 x 1024	79.976	75.025	135.000	Positive	Positive	1688	1066
1920 x 1080	67.500	60.000	148.500	Positive	Positive	2200	1125

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Note: For PC input, only the supported PC signal displays the correct resolution on TV display.

Troubleshooting

Why is there no sound or picture?

Check that the television is on and that all connections are made properly.

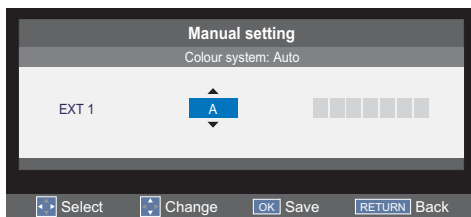
There is a picture, but why is there little or no colour?

The colour is factory set to Auto to automatically display the best colour system.

When using an external source, if there is little or no colour, improvements may sometimes be achieved.

To manually change the colour system:

1. With the external source playing, select **Manual setting** in the **SETUP** menu.
2. Using **▲** or **▼** to choose from **Auto**, **NTSC 4.43**, **NTSC 3.58**, **SECAM** or **PAL**.



Why doesn't the video/DVD being played show on-screen?

Make sure the Media player or DVD player is connected to the television, then select the correct input by pressing **↵**.

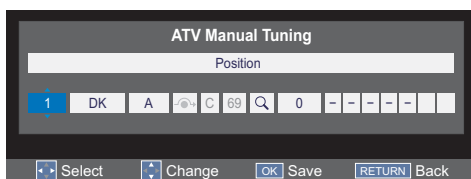
Why is there a good picture but no sound?

Check all cable connections and that the volume has not been turned down or that the sound has not been muted.

What else can cause a poor picture?

Interference or a weak signal. Try a different television station. Manual fine tuning may help:

1. Select the **ATV Manual Tuning** in the **SETUP** menu.
Highlight the station and press **OK**, then press **◀** or **▶** to select **Manual fine tuning**.



2. Using **▲** or **▼** to adjust to get the best picture and sound. Press **OK** and then **RETURN**.

Why doesn't the remote control work?

Check that the batteries aren't exhausted or inserted incorrectly.

Why are there problems with text?

Good performance of text depends on a strong broadcast signal. If the text is unreadable or garbled, check the aerial, satellite or cable connection. Go to the main index page of the text service and look for the User Guide. This will explain the basic operation of text in some detail.

Why are the four coloured text numbers visible but no text (Analogue Only)?

Text has been selected while viewing an external source. No text will appear on-screen or a box may appear stating no information is available. Select a broadcasting channel and press **⏏** to access.

What can be done if the user-defined password has been forgotten?

Use the universal password 1276, then change to a new number of your choice.

Why don't the devices connected via HDMI operate properly?

Make sure to use cables with the HDMI logo (**HDMI**®). Some early HDMI equipment may not work properly with the latest HDMI TV products, due to adoption of new standards.

Why is the Media Player/DVD picture in black and white?

Check the correct input has been chosen: S-VIDEO or AV.

Why did TV turn off by itself?

After roughly 15 minutes without any input video signal at TV mode, the TV will turn off to reduce power.

Specifications

Model

32W2300A, 39L2300A, 50L2300A

Power source

~220-240 50/60 HZ

Power consumption

32W2300A: 63W

39L2300A: 105W

50L2300A: 162W

Standby (approx.)

< 0.3W

Dimensions (includes foot stand)

32W2300A: 504mm(H) 736mm(W) 180mm(D)

39L2300A: 590mm(H) 891mm(W) 201mm(D)

50L2300A: 743mm(H) 1136mm(W) 232mm(D)

Mass (Weight)

32W2300A: 6.0kg

39L2300A: 8.0kg

50L2300A: 17.5kg

Analogue TV system (Antenna input)

Channel coverage:

PAL	B/G	(CCIR)	VHF	0 - 12
			UHF	27 - 69
		CATV	C2, C10, C31,	
			S2 - S44	

Digital TV System

Compliant Standard: DVB-T

Video Decoding: MP @ ML & MP @ HL

Audio Decoding: Dolby® Digital, MPEG (I & II)

Audio Sampling Rate: 32, 44.1, 48 kHz

Digital TV Terrestrial Tuner / Demodulator

Frequency: 51~858 MHz

Loop Through: 51~858 MHz

Bandwidth: 7 MHz/8MHz

Demodulator: COFDM

FFT Mode: 8 K

Constellation: QPSK, 64 QAM

Guard Interval: 1/8, 1/16

Inner Coding Rate: 2/3, 3/4

Component video input terminals (the signal format)

480i, 480p, 576i, 576p, 720p (50/60 Hz), 1080i (50/60 Hz) (These signal formats are converted to match the number of pixels of the LCD panel.)

Composite colour system (analogue TV system)

PAL, SECAM, NTSC 3.58/4.43

Aspect ratio

16 : 9

Visible size (diagonal)

32W2300A: 80cm

39L2300A: 98cm

50L2300A: 126cm

Number of pixels

32W2300A:

1366(H) x 768(V) dots

39L2300A, 50L2300A:

1920(H) x 1080(V) dots

Sound output (at 10 % distortion)

32W2300A, 39L2300A, 50L2300A:

7W + 7W

Input/Output terminals

Antenna Input: 75 Ω RF Input

Composite Input:

Video: RCA, CVBS

Audio: RCA, L/Mono+R

Component Input:

Video: RCA, Y (or CVBS), P_B/C_B, P_R/C_R

Audio: RCA, L/Mono+R

HDMI Input (type A): 19 pin, A/V Digital

RGB/PC Input:

Mini D-sub: 15 pin, Analogue RGB

Audio: 3.5mm

USB Input: USB 2.0

Flash Drive thickness: 9mm (max.)

Media Player Interface

Version: USB 2.0

USB class: USB Flash Drive

File system: FAT16 and FAT32

Digital Audio Output: Bitstream/PCM

Headphone jack: 3.5mm (Diameter) stereo

Operating condition

Temperature: 5°C - 35°C (41°F - 94°F)

Humidity: 20% - 80% (No moisture condensation)

Supplied accessories

Owner's manual (1), Remote control (1),

Batteries (2), TV fall prevention screw (1), Warranty card (1), Stand installation sheet (1), Pedestal screws (32"/39":6, 50":8)

- Design and specifications are subject to change without notice.
- Never service or remodel the TV by yourself. It may expose you to a fire hazard or dangerous voltages.

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Function	Library	Link	License	Header
MP3 decoder	libmpg123.c	http://mpg123.org/	GNU Lesser General Public License	Appendix A
JPEG decoder	jpeglib.h	http://www.koders.com/c/fidE-2795B75345089E3EACAAEA77B58CB48742FF59.aspx?s=md5	Free	Appendix B
PNG decoder	libpng 1.0.2	http://www.filewatcher.com/p/libpng-1.0.2.tar.gz.225386/libpng-1.0.2.htm	Free	Appendix C
Zlib	Zlib 1.1.3	ftp://ftp.cdrom.com/pub/infozip/zlib/	Free	Appendix D

Appendix A – MPEG Audio

Header part:

libmpg123: MPEG Audio Decoder library

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

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Appendix B – JPEG decoder

Header part:

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The Unix configuration script "configure" was produced with GNU Autoconf. It is copyright by the Free Software Foundation but is freely distributable. The same holds for its supporting scripts (config.guess, config.sub, ltconfig, ltmain.sh). Another support script, install-sh, is copyright by M.I.T. but is also freely distributable.

It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

"The Graphics Interchange Format(c) is the Copyright property of CompuServe Incorporated. GIF(sm) is a Service Mark property of CompuServe Incorporated."

Appendix C – PNG decoder

Header part:

```
/* png.h - header file for PNG reference library
*
* libpng 1.0.2 - June 14, 1998
* For conditions of distribution and use, see the COPYRIGHT NOTICE below.
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*
* The Contributing Authors and Group 42, Inc. specifically permit, without
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* appreciated.
*/
```

Appendix D – Zlib

Header part:

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